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# International Conference

on

Emerging Technologies in Education, Training and Business

(ICETESB 18)

Organized by

**Academic Research in Science, Engineering, Art and Management Foundation  
New Delhi**

**October 8<sup>th</sup> – 9<sup>th</sup>, 2018**



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Academic Research in Science, Engineering, Art and Management (ARSEAM) Foundation is a non-profit organisation for the promotion and development of research in the field of Science, Engineering, Art & Management in particular. The main goal of the Foundation is to provide a common platform to the academicians, Research Scholars, Students, Industrialist, professionals and practitioners for the exchange of ideas on the latest business innovations and Technological advancement to conduct more significant and fruitful research contributing in the development of society, Nation and World as a whole.

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### **ABOUT THE CONFERENCE**

'ICETESB' is being organized by Academic Research in Science, Engineering, Art & Management Foundation, New Delhi, India with the theme "EMERGING TECHNOLOGIES IN EDUCATION, SCIENCE & BUSINESS". This event will provide a platform to academicians, Research Scholars , Students, Industrialists, Professionals and Practitioners for exchange of ideas, practical experiences and insights into the evolution , formulation and implementation of Technological advancement in education , training and learning to meet the changing environment of academics and business. It will pave the way to conduct more significant and fruitful research. The objective of the conference is to encourage and foster discussion among teachers, practitioners, policy makers, and those who are interested in the application of technology for education, training and business.

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## **Preface**

The 'International Conference on Emerging Technologies in Education, Science and Business (ICETESB 18)' organized by Academic Research in Science, Engineering, Art and Management (ARSEAM) Foundation, New Delhi, India on October-8-9-2018. The conference has provided a common platform to Academicians, Research Scholars, Students, Industrialists, professionals and practitioners for exchange of ideas on the latest Technological advancement to conduct more significant and fruitful research contributing in the development of society, nation and world as a whole.

The pervasiveness of digital technologies and Internet has transformed the educational landscape. Teachers, practitioners, and policy makers have been seeking ways to innovate classrooms with digital technologies. The demand for quality teaching and the need to empower students as knowledge seekers have positioned educators and policy makers to the forefront of innovation and knowledge sharing.

The need has thus risen to explore the transformative potential of digital technologies for lifelong learning, reinventing ways to increase student engagement and learning experiences, and evaluating the application of digital technologies in society which are crucial in this digital technology era. Learning technologies used in the field of education are reshaping educational activities towards more adaptation and availability for the benefit of the learners.

**Mohd. Ibrahim**  
**Irshad Ahmad**

## **Message from Director, ARSEAM Foundation**



It is an affair of great pleasure for us that International Conference on Emerging Technologies in Education, Training and Business (ICETESB 18) is going to be organised by Academic Research in Science, Engineering, Art & Management (ARSEAM) Foundation, New Delhi.

The conference will focus on the various technique and methodologies along with their application to provide some solid proofs in contemporary development in technology for education and business for better managerial decision making. Further, this conference will also provide the opportunity to interact with some of the renowned experts in the domain of technology and management and other scholars from the globe.

I wish this conference will provide a platform to the researcher, scholars, academicians and practitioners to discuss various methods of evidence based management and contemporary development in technology and business. I wish the conference a grand success.

With Best Wishes

**Prof. Irshad Ahmad**

Managing Director,  
Academic Research in Science, Engineering, Art & Management  
(ARSEAM) Foundation, New Delhi

## Message from Conference Chair



I am extremely delighted to know that ARSEAM Foundation is holding an international conference on **Emerging Technologies in Education, Science & Business (ICETESB)** on 8th and 9th of Oct 2018.

Such conferences are a platform for the meeting of best minds & interaction. I am sure the students, researchers and all of us would gain immensely from this international conference.

International conferences have always been a big virtue to the best practices in pedagogy. Indeed it will be an opportunity for all of us to enhance our learning with the matured guidance of the delegates & guidance

Wishing this international conference all the very best.

Thank you

With Best Regards

**Mohammad Ibraheem**  
Technocrat from IT Industry,  
Noida

## Message from the Organising Committee Member



On the behalf of ARSEAM foundation (Academic Research in Science Engineering, Art and Management Foundation) I would like to welcome you to the International Conference on Emerging Technologies in Education Science & Business (ICETESB) 2018.

The conferences are necessary to bring in culture of information exchange and feedback on developing trends in technologies. I am delighted to note that ARSEAM is organizing the International Conference titled “Emerging Technologies in Education, Science & Business” 2018 (ICETESB). Certainly, this type of conference not only brings all the researchers, students at one platform, but it also inculcates the research culture among the entire fraternity of education in the country, thereby contributing to the development of nation.

I would like to express my thanks to all authors for their outstanding contributions. My heartfelt thanks go to the members of the program board for their competent evaluation of the large number of submissions and selecting the best papers. It was not an easy task. I would also like to express my appreciation to the advisory committee for its valuable suggestions. I especially congratulate Mr. Irshad Ahmad, Managing Director of ARSEAM Foundation, New Delhi. I wish to thank the organizing committee for their hard work in planning the conference.

I am confident that outcome of this conference would be of immense benefit for the large scientific communities as well as decision makers for implementing various developmental schemes. I hope that deliberations of the conference will provide a right direction to re-orient the research activities. I am looking forward to see you and wishing you a memorable time at the Conference.

With Best Wishes

**Dr. Md. Karar Ahmad**

Academic Co-ordinator/ Assistant Director  
Centre for Distance and Open Learning  
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New Delhi

# International Journal of Advance and Innovative Research

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**PERSPECTIVE OF MANAGEMENT EDUCATION BY PROSPECTIVE MANAGERS: B' SCHOOLS  
VIS-À-VIS UNIVERSITIES**

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**Dr. G. V. Satya Sekhar**Associate Professor, Centre for Distance Learning, GITAM- Deemed to be University, Visakhapatnam

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**ABSTRACT**

*Managers are not born, they are made. They are made in b'schools or universities. These institutions are expected to have more understood about the future managers of the industry. But, the mismatch is deepening among expectations of industry, students and education institutions offering the degree 'Master of Business Administration ((MBA)'. Some universities are still following traditional way of designing curriculum, pedagogy and training methods for prospective managers, whereas most of the B'schools are competing among themselves to attract more students in the area of management education.*

*In this context, this paper is aimed to identify the perspective of students pursuing management degrees across b'schools and universities, during their study period.*

**OBJECTIVES**

1. To understand the basic objectives of educational philosophy.
2. To make a comparative analysis of prospective manager's perspective on management education offered at b'schools vis-à-vis universities.

*Keywords: Management education, Student life style, education philosophy, pedagogy.*

---

**INTRODUCTION**

Present generation who are pursuing management education is expecting much from industry vice-versa. Student life also includes personal lifestyle factors. Depending on the situation, one will have to juggle time commitments with family, school, and possibly work. The student also has to consider your family make-up. Pursuing a programme entitled 'Master of Business Administration' (MBA) will involve some sacrifice from everyone in the family. Prospective Management student life as you experience depends largely on the type of program you choose.

There are four types of programmes: a) Full time MBA, b) Par-time MBA, c) Executive MBA and d) MBA through distance education.

1. **Full-Time MBA:** In a full-time MBA program, the MBA program is the student's life. Full-time students spend plenty of time in the classroom. However, a lot of time is also spent outside of the classroom on assignments and projects. Group work also consumes a lot of time. But we can observe a lot of difference between the programme offered by a B'school and an university with regard to classes and assignments. This is also based on the origin of B'school i.e. India vs Abroad.
2. **Part-Time MBA:** Student life in a part-time program may not be as intensely focused, but the student has to also contend with work commitments. This adds a whole level of complexity. Classes are done at night or on weekends, so there is virtually no personal free time. As with any MBA program, a lot of work goes on outside of the classroom. Part-time students end up squeezing in homework and projects between work and family commitments.
3. **Executive MBA:** Students in executive MBA programs have the most hectic schedule. The life of an executive or upper-level manager is already consumed by work commitments, not to mention family life. Add to that an MBA program and student should really have to balance. On a positive note, executive programs are tailored to fit their students.
4. **MBA (open and distance learning):** Student life for distance MBA students is the most variable among all the program types. Students who like the flexibility and take classes through open and distance learning methods.

**NEED FOR MBA**

As the environment of organization-including economic, political, competitive, regulatory, and cultural factors becomes more complex, there is an increased demand for managers with the necessary skills, understanding, courage, and energy to tackle the difficult demands facing organizations of all kinds. To be a successful manager, an individual need skills in decision-making, financial analysis, and interpersonal relationships. He

also needs the ability to apply those skills in a context of constraints, opportunities, and alternatives. Professional management programs are based on the premise that people can learn to manage all types of business situations more effectively. MBA programs not only help their students to develop skills that are highly valued by many employers, but the programs also present a theoretical context for solving many business problems.

### **PHILOSOPHY OF EDUCATION**

Charles Humme (1993) quotes the definition of education given by Aristotle that 'the goal of education is identical with the goal of man'. Obviously all forms of education are explicitly or implicitly directed towards a human ideal. But Aristotle considers that education is essential for the complete self-realization of man.

Aristotle philosophy provided not only the logical tool but also the wisdom which enabled such men as Albetus Magnus and Thomas Acquinas to create a systematic Christian philosophy during the period of 384 BC - 322 BC. He states that "the educator can be successful only if he works with a discipline that is willing to absorb suggestions". Plato wishes that all means of education be concentrated systematically towards bringing about a full and mature personality.

According to Aristotle, "education must count on sound physique of the educand. Therefore right diet and proper gymnastic are basic needs of educand. But they cannot do all, for the development of an individual is largely determined by hereditary factors not only physically, but also with respect to psychological qualities, what we call 'a healthy nature', in the broadest sense of the word healthy, is mixture of endowment and accomplishment".

Plato(1941) states that education is the process of drawing and guiding children towards that principle which is pronounced right by the law and confirmed as truly right by the experience of the oldest and most just. The spirit of Plato's concepts as a true philosopher was far beyond the horizon of the school in. Thus, his view can not to be pressed into the typical school systems supported by parents who want their children to be adapted to the prevailing social or professional standards.

During 17<sup>th</sup> century, philosophers made a concept which jolted educators out of their complacent routine is 'Retournez A 'La Nature' changed educational methods and influenced the attitude of parents to such a degree that a childhood was no longer considered a merely inferior state of adulthood. Education is considered as an effective tool for achieving the objectives, such that it is claimed to be 'great equalizer' and a surrogate to radical restructuring without involving bloodshed and violence, more so in a regime where radical measures have been discounted.

Ulich(1967) explains the grassroots of educational philosophy. Collins (1976) focuses on Rousseau's philosophy of education that should be 'negative' nature, though the principle is fundamentally incompatible with the constantly intervening authority "Tutor".

Benjamin Franklin (1747) states that - "men should be taught as if you taught them not, and things unknown proposed as they forgot". He also states that the Tutor encourages his pupil to initiate good example. He creates senses and experiences favourable to the right conditioning of the pupil's behaviour and to his preparation for life. The child feels and experiences favorable to the right conditioning of the pupil's behavior and to his preparation for life. If the child senses this care without feeling thwarted by it, he develops for his tutor a higher and higher and more intimate sense of respect than could ever be created by any external authority.

After the 11 year of the life, this concrete kind of education makes away for a more intellectual kind". Hence, the whole of education for Franklin is synonymous with the one's life. As water cannot run uphill, school cannot save a corrupt civilization. Several plans and proposals relating to special educational institutions were all linked with these general ideas about the improvement of society. This is really the apex of educational wisdom. Education is the manifestation of the perfection of self. Education which does not help the common mass to equip themselves for the strength of character, a spirit of philanthropy, and the courage of lion, is not worth. The very essence of education is concentration of mind, not the collecting facts. We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet.

Swami Vivekananda (2002) sates that "Education is not the amount of information that is put into brain and riot there undigested all your life. We must have life-building, man-making, character-making, assimilation of ideas". The ass carrying its load of sandal wood knows only the weight and not the value of the sand wood. If education is identical with information, the libraries are greatest sages in the world, and

encyclopedias are Rishis. The ideal, therefore, is that the whole education of our country should be spiritual and secular, and it must be on national lines, through national methods as far as practical.

Gandhi thought about equality between the sexes, for this is a matter of very vital importance in these days of women's liberation movements and gender justice. He wrote in *Young India*, of May 23<sup>rd</sup>, 1929, as given below:

"What is necessary is to overhaul the educational system and to devise one in terms of the masses. No system will be even passable that does not lay stress on adult education equally with that of children, the few education women we have in India will have to descend from their western heights and come down to India's plans". He states that it is not the education merely of women that it is fault. It is the whole of our educational system that is rotten.

Gandhi means that all round drawing out of the best in child and man-body, mind and spirit by education. Our system of education should lead to the development of the mind, body and soul. *Nai-Talim* (basic education) was not confined to teaching, spinning and A little sweeping. However, indispensable these were value less, unless they are promoted to the harmonious development referred to. Gandhian view regarding true education of the intellect can only come through proper exercise and training of bodily organs, hands, feet, eyes, ears, nose etc. In other words, an intelligent use of organs in a child provides the best and quickest way of developing his intellect. But unless the development of the mind goes hand in hand with a corresponding awakening of the soul, the former alone would prove to be poor lop-sided affair. Spiritual training means education of the heart. A proper and all round development of the mind, therefore, can take place only when it precedes *paripassu* with education of the physical and spiritual faculties of the child. John Virgis (1998) study focuses on Gandhian philosophy towards women education.

Jawaharlal Nehru, as the first Prime Minister of India felt that it is the duty of the state to provide free education to every child in the country. Nehru opined that education has mainly two aspects, cultural aspect with which a person grow, and the productive aspect which makes a person to do things. Both are essential. Everybody should be a producer as well as a good citizen. There was warning given against philosophical learning without discipline of conduct. Nehru refers Prof. Hogber's (1942) statements in 'Discovery of India', "that to accept it is to recognize that every culture contains within itself its own doom, unless it pays as much attention to the education of the mass of the kind as to the educational of the exceptionally gifted people. Nehru states that "you may become a distinguished mathematician or eminent individual otherwise, but you will find that you will be even better mathematician if your body functions properly. I do not like persons going about with a bent back. I want them to be straight like a ramrod and walk erect. I want them to be quick in their walk not to saunter and loiter as many do".

Nehru strongly supports Gandhian philosophy of basic education. According to him, "basic education stresses both things physical or cultural fitness and ability to do things with hands. One can take it from me that if your hands can do things, your mind will work more satisfactorily". The child will be mostly influenced by the environment of school, where he studying. Therefore it is absolutely necessary for their lessons, but a world guiding spirit in personal love and affection. Education in the true sense is helping the individual to be mature and free to flower greatly in love and goodness. That is what we should be interested in, and not in shaping the child according to some idealistic pattern. It is necessary to encourage the development of a good mind that is capable of dealing with many issues of life as a whole and which does not try to escape from them and so become contradictory, frustrated, bitter or cynical. And it is essential that it should be aware of its own conditioning, its motives and pursuits. The highest function of education is to bring about an integrated individual who is capable of dealing with life as a whole. The idealist, like the specialist, is not concerned with the whole, but only with part. There can be no integration as long as one is pursuing an ideal pattern of action, and most teachers who are idealists have put away love, they have dry minds and hard hearts. To study a child, one has to be alert, watchful, self aware, and this demands for greater intelligence and affection than to encourage him to follow an ideal.

Dr. S. Radhakrishnan, described the aim of education as necessarily providing for a second birth of an individual and entrusted this responsibility to teachers, who are in charge of students at a very impressionable period in their lives. He believed that "every attempt should be made to draw a good proportion of the ability in the country into the teaching profession.

The philosophical views of Radhakrishnan about education examined by Gangal are (1) the education should deepen our insight, widen our horizon, create a meaningful outlook; (2) Education is the process by which we conserve valuable elements in our culture and discard wasteful. It is both a stabilizing influence and an agent for change. By means of it we help the youth to become good citizens of the country. (3) Education to be complete, must be humane, it must include not; and (4) only the training of the intellect but also the refinement of the heart and discipline of the spirit.

There should be no basic disagreement about the necessity of teaching fundamental skills and knowledge in the elementary school. The aim of modern education seeks to go beyond the narrow concept of fundamentals which once obtained in the American Educational Philosophy. For example, the elementary school student today must be taught not only to read but also to listen attentively, to observe carefully, and to speak effectively. He must receive preliminary preparation now for many of the later responsibilities of adulthood - how to buy consumer goods intelligently, maintain an attractive home, and otherwise participative in the economy of his culture. Child must know not only the outline of past history, but be able to understand current happenings. He must able to uphold democratic tradition and to live effectively in a democratic country. Thus, modern education aims to produce, mature, competent, conscientious and effective individuals.

**SURVEY RESULTS**

Some surprising figures come as a result of a survey by vouchercodes.co.uk. According to survey 30% students are turning eBay and 36% use the internet other means to make extra cash and some are even living on these sources. The trend for using ‘ebay’ and ‘internet business’ affects employment opportunities for students and also job market hit by recession. Different surveys show that undergraduates are turning to eBay, even those who have part time jobs. This means at least one whole day’s studying is lost to work. Survey also showed that 7% use blogs and are adapting to affiliate marketing whilst others simply sell items on the plethora of online marketplaces available on the web. Table 1 to Table 8 provides data relating to student opinion regarding management education. The following interesting insights are observed:

- Life style of student in B’school is more expensive than that of a university.
- Use of internet is mostly for email communication, research and knowledge sharing.
- Guidance for placement is very poor in universities.
- Usage of library is more in case of students pursuing management education in B’schools than that of Universities.
- We can find opinion variation regarding friendship during the tenure of study.

**CONCLUSION**

This paper is intended to analyze the perspectives of prospective managers (who are pursuing MBA). The results are focused on various issues like: life style, library usage, internet usage, placement guidance, extra-curricular activities and friendship. Data is presented across B’school vis-à-vis Universities.

**Table:1 - Best Place for Study (per cent)**

Classification →	B’School		University		Total
	Male	Female	Male	Female	
Place ↓					
Institution	18	12	2	2	34
Home	-	-	5	6	11
Internet café	6	4	6	2	18
Co-study with friends	20	4	8	5	37
Total	44	20	21	15	100

**Table:2 - Usage of Library (per cent)**

Classification →	B’ School		University		Total
	Male	Female	Male	Female	
Usage per Week ↓					
0-14 hrs	4	-	-	10	14
14-21 hrs	10	2	2	-	14

21-28 hrs	4	4	4	-	12
Above 28 hrs	26	10	4	-	40
Total	44	16	10	10	100

**Table: 3 - Purpose of Internet (per cent)**

Classification →	B' School		University	
	Male	Female	Male	Female
Purpose ↓				
E-mail	96	90	98	95
Academic purpose	85	70	75	65
Research work	60	50	85	65
On-line shopping	30	25	35	30
On-line banking	35	20	45	25
Other than above	55	25	35	45

**Table: 4- Extra Curricular Activities are Waste Of Time (per cent)**

Classification →	B' School		University		Total
	Male	Female	Male	Female	
Opinion ↓					
Strongly Disagree	28	8	10	2	48
Disagree	8	4	2	1	15
Neither Agree or Disagree	4	5	2	4	15
Agree	4	-	-	4	8
Strongly Agree	3	4	5	2	14
Total	47	21	19	13	100

**Table: 5- Guidance for Placements is Very Poor (per cent)**

Classification →	B' School		University		Total
	Male	Female	Male	Female	
Opinion ↓					
Strongly Disagree	34	6	2	1	43
Disagree	2	2	8	6	18
Neither Agree or Disagree	4	6	-	2	12
Agree	-	2	-	-	2
Strongly Agree	2	3	12	8	25
Total	42	19	22	17	100

**Table :6 - Student's Life Style is Expensive (per cent)**

Classification →	B' School		University		Total
	Male	Female	Male	Female	
Opinion ↓					
Strongly Disagree		2			2
Disagree	10	16	-	-	26
Neither Agree or Disagree	4	4	-	4	12
Agree	2	-	-	-	2
Strongly Agree	34	6	10	8	48
Total	50	28	10	12	100

**Table: 7 - Luxurious Outlook is Necessary (per cent)**

Classification →	B' School		University		Total
	Male	Female	Male	Female	
Opinion ↓					
Strongly Disagree	40	12	-	2	54
Disagree	-	-	4	6	10
Neither Agree or Disagree	4	4	2	2	12

Agree	-	-	2	-	2
Strongly Agree	9	3	2	2	16
Total	53	19	10	12	100

**Table: 8 - Opinion About Freindship (per cent)**

Classification →	B' School		University	
	Male	Female	Male	Female
Friendship for entertainment	93	86	99	96
Friendship for sharing knowledge	87	72	77	68
Friendship for future relationship	63	53	81	32

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**ROLE OF ICT IN HIGHER EDUCATION****Dr. Krishan Kumar Ahuja**

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**ABSTRACT**

*The Education is fundamental to development and growth. It is the most important tool to elimination gender inequality, to reducing poverty, to fostering peace and for building an equitable society. Education also promotes national interest and acts as an integrative force in society, imparting value that foster social Cohesion and national identity. This makes Education a subject of high priority for every country. Higher Education is one of the major contributors to national wealth and economic development. It is a tool to exploit the potential aspiration of the people for economic and technological development, which is a driving force for advancement of the country. Higher education institutes are multifaceted establishments that must give equal importance to all three dimensions of education I. e. Teaching, Research and Community engagement. But it is observe that the Indian higher education does not adequately address the quality of educational provisions. It is the bitter reality that Higher Education in India is in critical Chaotic Condition. It is lagging behind mainly due to lacunae in quality, access, regulation, governance, privatization, research, faculty, student migration etc. The Indian education system needs improvement in all levels – from primary schools to higher education and research institutions to exploit the immense dormant potential realize their full potential in the global economy. Max Plank once said, “When you change the way you look at things, the things you look at, change”*

*Keywords: Education, Higher Education, I.C.T., Digital Education*

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**INTRODUCTION**

Education in its general sense is a form of learning in which the knowledge, skills and habits of a group of people are transferred from one generation to the next through teaching, training or research. Education system at any level is primarily based on three H- Head, Heart and Hand related to three domains of learning, cognitive, affective and psychomotor respectively. Today emphasis is given more on skill development which is directly related to cognitive and psychomotor domain. Technology is an indispensable part of skill development.

The fundamental goal of higher education should be the mental development for intellectual attainment and wisdom, material development for survival and prosperity and moral development for dignity and quality of life. Thus, higher education should produce a happy blend of material mental and spiritual knowledge to help human excellence to blossom.

The era of 21<sup>st</sup> century is considered the era of technology. Technology is a term that refers to a body of knowledge that is employed to generate tools, create skills and choose materials for human use. Technology includes the use of material, tools, techniques and sources of power to make life easier or more pleasant and work more productive. Technology and science has achieved great advancement. Several specialized technology-based areas are being designed as important components of the higher education curriculums.

Gradually as technology was embraced by the educational institutes, they realized the importance of technology in education. Its positives outnumbered the negative and now, with technology, education has taken a whole new meaning that it leaves us with no doubt that our educational system has been transformed owing to the ever advancing technology. Technology and education are a great combination if used together with a right reason and vision.

Technological developments like digital cameras, projectors, mind training software, computers, power point presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily. It has to be understood that visual explanation of concepts making learning fun and enjoyable for students. They are able to participate more in the classroom and even teachers get a chance to make the classes more interactive and interesting. Students can “meet” their counterparts through video conferencing without leaving the classroom. Distance learning and online education have become very important part of the education system nowadays.

Envisioning role of education in the 21<sup>st</sup> century, is incomplete without thinking about technology, innovation and research. The ongoing changes at all fronts i.e. political, social, cultural and economic sectors are relying on the contribution of educated human resource in the country. At the same time, more than ever before, the need for envisioning future oriented education to sustain and innovate human and national development. Educational innovations with technology of education (i.e. systematic approach to the teaching-learning process); and

technology in education (e.g. use of hardware and software) are imperative for designing educational programmes and strategies for seeing tomorrow's development.

In the current scenario, infusion of technology in the various dimensions of higher education is matching the pace of development and improvements in technology especially Information, Communication, Technologies (ICT). This has led not only to unprecedented expansion and transformation of higher education systems across the globe but also the national level initiatives for ensuring quality of their output. Although, it is observed that new technologies have immense potential to effect change and to meet the broader needs of today's tech-savvy learners yet the feeling that traditional model/fabric of university education is threatened also persists.

The higher education system in India is transiting through this massification experience and this transformation has considerably added to the existing challenges related to provision of access, equity and quality in the higher education sector. Also, this transition is highly influenced by the swift developments in information and communication technologies (ICTS) all over the world. In fact, the optimal utilization of opportunities arising due to diffusion of ICTs in higher education system presents a profound challenge for higher education institutions. Looking back, the inclusion of developments in ICTs in higher education system in India during the last two decades is continuing at fast pace. Even then, the challenge to develop a higher education system that is flexible and dynamic so as to holistically integrate the technology in the management and delivery of learning programmes is daunting. At the same time, the introduction of ICTs in the higher education has profound implications for the whole education process ranging from investment to use of technologies in dealing with key issues of access, equity, management, efficiency, pedagogy and quality.

Presently, in India the push for the use of digital technologies in higher education sector is growing. This really raises the need to ascertain the aim of introduction of digital initiatives, the type of initiatives, their delivery and impact on teaching learning, requirement of proficiencies on part of teachers and facilitation by the institutions. Since initiatives to integrate technology in teaching learning are continuing from the past decade, this article would focus on nature and extent of the initiatives taking place in the universities of teachers and students and finally the section would discuss the challenges and prospects for improving teaching learning with technologies.

### **BENEFITS OF DIGITAL EDUCATION**

**Facilitate Accessibility** – Wave of technological innovations has facilitated accessibility of digital content owing to advanced features of mobile networking coupled with cloud services connecting internet of things.

**Accelerate Learning** -With digitization, education process expedited with flexibility in learning and sharing digital information. Students can always find buffered study materials with on-line and off-line viewing and downloading options. This helps learners to always remain updated with classroom activities and course curriculum.

**Enable Interactive Session**-Besides accessibility, digital education offers content enriched with user-friendly and highly interactive educational web portals and kiosks. This increased interactivity has shifted the paradigm of chalk-and-talk to touch-and-feel. Interactive sessions also provides extensibility to learners and teachers for customizing options according to their suitability.

**Kindle Creativity**-With huge options available online, the learners are often found to amalgamate innovation with presentation in novel and creative ways.

**Recommend Collaboration**-Digital education allows to discover training opportunities and research collaborations along with encouraging increased participation in growing online communities of researchers, Such collaborations often allows communication with external councilors and peers.

**Evolve With Technological progress**-Upgraded and enabling technology inevitably opens up brighter options with broader opportunities to learn, express and share.

**Prevent Plagiarism**-Digitized data stored over online servers extend prospects for cross verification of documents for plagiarism, thereby authenticating approving and improving content.

**Build e-Repository for Research & Development**-Online storage mechanisms are capable to hold colossal amount of digital information. Depending upon the criticality of information, the materials could be distributed over multiple servers to enhance reliability and fault tolerancy. Moreover, such storage systems are coupled with powerful processors to increase the efficacy of information management and retrieval process.

**Ensure Security & Privacy**-Digital world offers high-end security to on-line document on the basis of several parameters, including user profiles, location, date and time etc. For instance, teachers can share solution to exam

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papers among themselves and obstruct students to view the same till exam or assignment activities deadlines are over.

**Promote Green Learning**-Digitization has promoted education from paper-to-pixel to motivate learners for saving paper or printed materials.

### **CONCLUSION**

The Government of India's vision of Digital India campaign has given hopes to many educational institutions and universities to bring revolution in changes in the education system with a positive outlook. New techniques have introduced more flexibility to the education process and have a strong emphasis on student motivation and their involvement in learning. Indian government and Ministry of Human Resources Development has initiated some platforms to proficiently deal with the digital education. The Consortium of Educational Communication (CEC) being an Inter-University Grants Commission (UGC) on Electronic Media works endlessly in tandem to produce and generate educational content in various forms which can be accessed through modes like e-content, MOOC's, DTH channels, it provides the study material at free hand access to each and every student. An excellent method for connecting students, these platforms let them join online classrooms thereby, boosting student productivity and giving them a chance to work in a friendly and relaxed environment where they can develop and enhance their skills. Modern means of communication have greatly benefitted students by incorporating to active student participation, thereby transforming the basic foundations of traditional education and developing a more personalized education system.

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**A STUDY OF ADOPTION AND USE OF DIGITAL LEARNING TECHNOLOGY AMONG STUDENTS OF HIGHER EDUCATION IN EMERGING ECONOMIES****Namrata Yadav Das<sup>1</sup> and Dr. Abhijit Das<sup>2</sup>**Guest Lecturer<sup>1</sup>, Department of Business Administration, MJP Rohilkhand University, BareillyProfessor<sup>2</sup>, Department of Business Administration, ABES Engineering College, Ghaziabad

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**ABSTRACT**

*Learning is no longer restricted to the classroom and is not limited by place of study, time or pace. Students can study anywhere, anytime and at their own pace.*

*Digital technology has become all pervasive and there is no aspect of our lives, which has remained untouched by this phenomenon. Digital technology is also changing the face of the education industry at a rapid pace. Large medium and small institutions are undergoing transformation with the deployment of digital technologies for connected products, connected assets, connected people or connected markets. To ensure this growth is scalable, it is critical to have a pool of talent that is equipped with skills to ideate, innovate and work on transformational digital learning technologies.*

*Technology can play an important role in raising productivity, efficiency and innovation, and can become an important driver of both economic growth and social development. In this context India would serve as a model for emerging economies to emulate. Digital learning can open doors to tremendous opportunities for everyone. Teachers, peers, parents, experts, technology providers and employers can join hands effectively to provide a holistic learning experience. This study will aim to*

- *To develop a detailed understanding of how digital learning technologies are being adopted and used by students in institutions of higher education in Emerging Economies.*
- *To provide evidence for the benefits that accrue through the effective use of digital learning technologies.*
- *To develop a detailed understanding of the challenges in effective use of digital learning technologies by students in institutions of higher education in Emerging Economies.*

*Keywords: Digital Learning, Technology, Higher Education*

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**INTRODUCTION**

Digital technology has become all pervasive and there is no aspect of our lives, which has remained untouched by this phenomenon. Digital technology is also changing the face of the education industry at a rapid pace. Large medium and small institutions are undergoing transformation with the deployment of digital technologies for associated products, associated resources, associated individuals or associated markets. To ensure this growth is scalable, it is critical to have a pool of talent that is equipped with skills to ideate, innovate and work on transformational digital learning technologies. Universities / Colleges in Emerging economies have to create world-class skills on innovation solution & learning platforms. Learning is no longer restricted to the place of study, time or pace. Students can study anywhere, anytime and at their own pace. Digital learning Technology is not limited to just providing students with a laptop. Digital learning technology requires a combination of technology, digital content and instructions.

**Technology:** Technology is the instrument for delivering scholastic content. It encourages the manner in which academic content is received by students. It includes Internet access and hardware, which can be any Internet access device – from a desktop to a laptop to an iPad to a smartphone. Technology is the tool, not the instruction. It may be in the form of hardware or software or a blend of both.

**Digital Content:** Academic digital content refers to the high quality academic material which is delivered through digital technology. It is what students learn. . It ranges from new captivating, intuitive and versatile software to literature to video lectures to games. The latest entrant into this field is the concept of “MOOCs” or Massive Open Online Courses like NPTEL, SWAYAM, IITs, IISC, edX, Future Learn, Harvard Business School, Open SAP, Openclassrooms, Stanford OpenEdx etc. A Massive Open Online Course (MOOC) is an internet based portal which provides unlimited number of students worldwide with a chance of distance education with the best institutes in the world. It was established back in 2008 and turned into a prevalent learning apparatus by 2012.

**Instruction:** Educators are fundamental to advanced digital learning. Technology may change the role of the teacher but it will never dispose of the requirement for an educator. With digital learning, teachers will be able

to provide the personalized direction and help to ensure students learn and stay on track – throughout the year– to graduate successfully from institutions of higher education.

**INDIA AS A MODEL FOR EMERGING ECONOMIES**

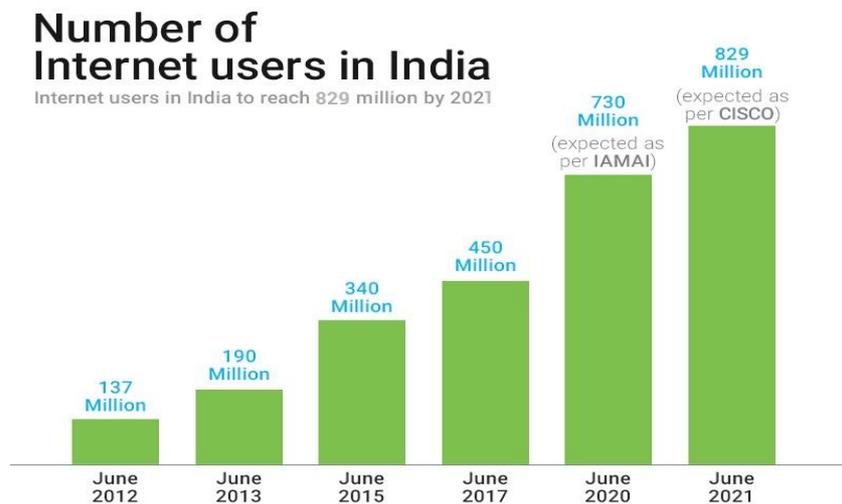
Technology is proving to have a disruptive influence on education today. With digital innovation as an impetus, education is moving from an information exchange model to a shared, dynamic, self-coordinated, and drawing in model. This change couldn't have come at a better time for India. While India's ability in Information . Technology is a characterizing component of its worldwide image, extensive parts of the nation still remain untouched by its power. Technology can assume an essential job in raising profitability, proficiency and advancement, and can turn into an imperative driver of both monetary development and social improvement. In this context India would serve as a model for emerging economies to emulate. Digital learning can open ways to enormous prospects for everybody, including educators, peers, guardians, specialists, innovation suppliers and businesses can hold hands successfully to give an all encompassing learning experience.

It is only in top technical and professional educational institutions In India that Digital Learning platforms are being used on a regular basis.

The urban population in India is expected to grow faster than its overall population by 2030. This will create a huge pressure on the economy and the academic system. Along with this there are other challenges in our education system. First is the sheer capacity to deliver education to all sections of our society. The quality of existing educational institutions is another challenge. Digital innovation has the ability to address every one of these issues. Patterns, for example, the developing infiltration of fast broadband, low cost computing devices and a solid push from the Government are quickening the change of India's academic system.

**GROWTH OF INTERNET IN INDIA**

The Internet and a proliferation of Internet access devices have given students the ability to learn anytime. The major reasons for growth of this technology include the increasing penetration of mobile Internet, higher purchases of smartphones, need for time convenience and higher portability. Less expensive smartphones have made it easier for people to get connected to the internet from their handheld devices. Add to it the fact that the percentage of young population in India (who are the most active online buyers) is huge. India is slated to become the world's youngest nation by 2022. The web is additionally getting less expensive. Every one of these components together make the future look splendid for the adoption of Digital Learning Technology.



Source: Cisco

Internet penetration in India has increased from 13.7 percent in 2013 to 19.19 percent in 2014. The increase in Internet penetration is a function of the increasing number of Internet users and connections in India. As of December 2013, the total Internet user base in India was approximately 261 million and reached 302 million by end of 2014. The number of Internet users stood at 481 million in December 2017, an increase of 11.34% over December 2016 . The number of internet users in India is expected to reach 500 million by June 2018, according to a report by the Internet and Mobile Association of India (IAMAI) and Kantar IMRB. Driven predominantly by wireless access, wireless connections constituted about 86 percent of the total Internet connections in India and they keep on developing at a quicker pace contrasted with the development rates of wireline connections.

**DIGITAL LEARNING TECHNOLOGIES**

Institutions of higher education are increasingly adopting Digital Learning Tools in emerging economies to support and enhance their teaching, learning and management activities. The precise nature and form of these technologies varies from institution to institution, most often involving the use of management information systems, virtual learning environments, communications technologies and other information and resource sharing technologies.

In many institutions of higher education in India, these technologies are integrated into shared online systems and environments that allow teaching staff, learners and parents to access learning resources, communicate and collaborate with each other, and enable these institutions to monitor, assess and report on the learner’s progress.

A Digital learning platform is an integrated set of interactive online services that provide teachers, learners, parents and other stakeholders involved in education with information, tools and resources to support and enhance educational delivery and management. It is designed to support teaching, learning, management and administration. In implementing a Digital Learning platform, education providers can customize its functionality to the needs of their users by bringing together a range of different software applications which have particular features.

Use of Digital Learning Technologies has been seen as an extension of the institution’s continuing use of ICT over the past. In many cases, Digital Learning Technologies are now a fully integrated part of the culture of the institution.

As budgets are slashed and marginal programs are eliminated in the current economic crisis, only the most articulate and productive will survive. Digital Learning Technologies are proliferating, but most remain difficult to use, and digital learning remains a backwater in most institutions with respect to teaching and learning practices.

Digital Learning Technologies can leverage the nation’s investment in cyber infrastructure to benefit learning at all ages. Digital Learning Technologies could be used to make material more readily accessible for learning and outreach to higher education. Digital Learning Technologies encompasses the sciences, social sciences, humanities, and arts, and is an important international initiative.

The adoption of digital learning technologies has been slow, limited by reliance on unique tools, proprietary software, and general lack of awareness. Unless products are easily adapted to new uses, others have little incentive to invest in them. Digital Learning initiatives include constructing common technical platforms that will improve the sustainability and reuse of tools, services, and content.

Digital Learning Technologies lead to creation of online spaces for learners to meet with other learners, to expand opportunities for communication between learners, including the use of learner discussion forums for asking and answering questions on curriculum topics, and the use of social networking sites.

**RESEARCH METHODOLOGY**

A Conclusive –Descriptive research design was used, with a structured questionnaire that was administered through personal interview.

For the current study, the convenience sampling approach was used to gain participants. This sampling approach was chosen for this study because the researcher could get people who would be easily accessible. The sample of the study population was undergraduate/graduate students at various Institutions of higher education, in the NCR (National Capital Region) of India. This population was conveniently selected because they are most likely to be using electronic and mobile devices on campus. Ultimately, a convenience sample of 200 undergraduate/graduate students was examined. The sample size was determined by the size of the population with consideration of the margin of error and the confidence level.

**DATA ANALYSIS & FINDINGS**

**1. Academic Program level in which the respondent had enrolled.**

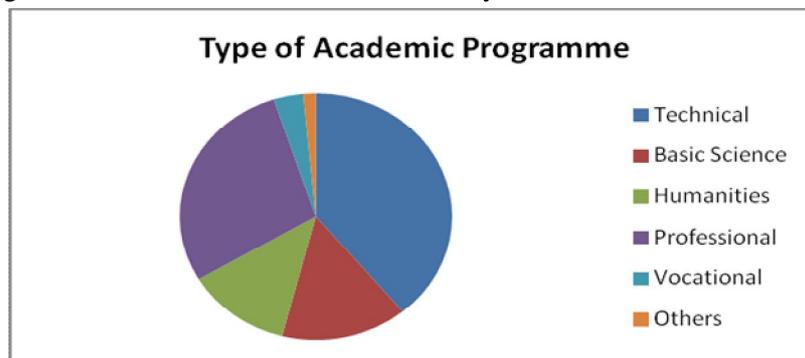
Programme	No. of Respondents	% of Respondents
UG	88	44
Graduate and above	112	56

**Findings:** 44 % of the respondents were undergraduates while 56 % were graduates and above

2. Type of Academic Program level in which the respondent had enrolled.

Type of Academic Programme	No. of Respondents	% of Respondents
Technical	78	39
Basic Science	30	15
Humanities	25	12.5
Professional	57	28.5
Vocational	7	3.5
Others	3	1.5
Total	200	

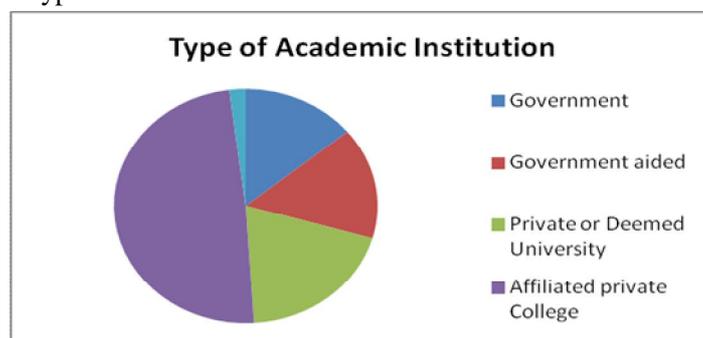
**Findings:** 39 % of the respondents were enrolled in technical courses, 15% in basic sciences, 12.5 % in humanities, 28.5% in professional courses, 3.5% in vocational courses and 1.5% in others. Students from varying academic programmes have been included in this study.



3. Type of academic institution in which the respondents had enrolled.

Type of Academic Institution	No. of Respondents	% of Respondents
Government	28	14
Government aided	31	15.5
Private or Deemed University	39	19.5
Affiliated private College	98	49
Others	4	2
Total	200	

**Findings:** 14 % of the respondents were enrolled in government institutions, 15.5% in government aided institutions, 19.5 % in Private or Deemed Universities, , 49% in Affiliated private Colleges, 2% in others. Respondents from different types of academic institutions have been included in this study.

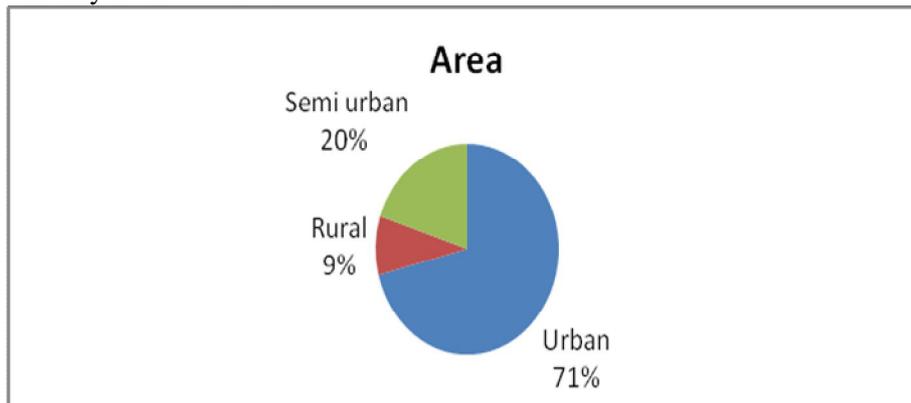


4. Area in which the academic institution is located.

Area	No. of Respondents	% of Respondents
Urban	142	71
Rural	18	9
Semi urban	40	20
Total	200	

**Findings:** 71 % of the respondents were from urban areas, 9% from rural areas , and 20% from semi urban areas.

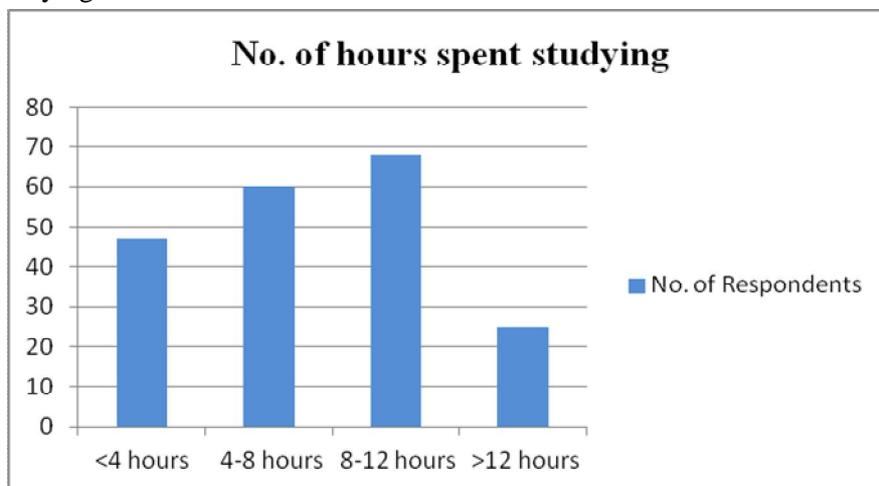
Respondents were mainly from Urban areas.



5. No. of hours in a week the respondent normally spends studying.

No. of hours/ week	No. of Respondents	% of Respondents
<4 hours	47	23.5
4-8 hours	60	30
8-12 hours	68	34
>12 hours	25	12.5
Total	200	

**Findings:** 23.5 % of the respondents spent less than 4 hrs studying, 30 % of the respondents spent less than 4-8 hrs studying, 34% of the respondents spent less than 8-12 hrs studying and 12.5 % of the respondents spent more than 12 hrs studying.

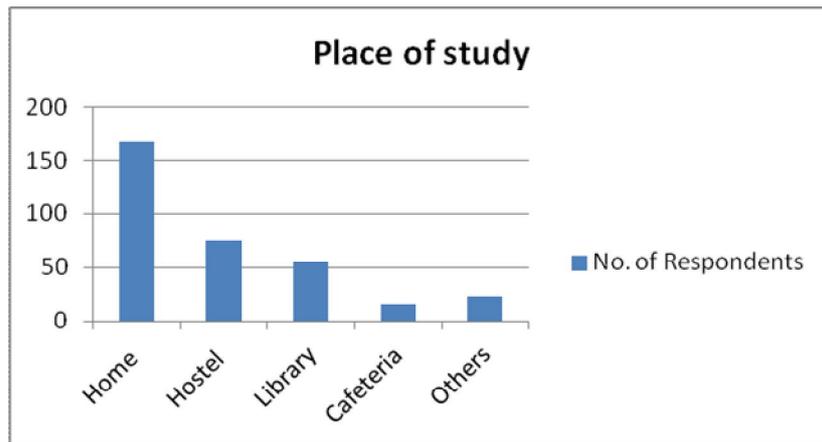


6. Place of study

Place of study	No. of Respondents	% of Respondents
Home	167	83.5
Hostel	75	37.5
Library	55	27.5
Cafeteria	16	8
Others	23	11.5

**Findings:** 83.5 % of the respondents preferred to study at home, 37.5 % of the respondents preferred to study in hostels, 27.5 % of the respondents preferred to study in the library, 8 % of the respondents preferred to study in the cafeteria.

Some respondents may prefer studying in multiple locations.

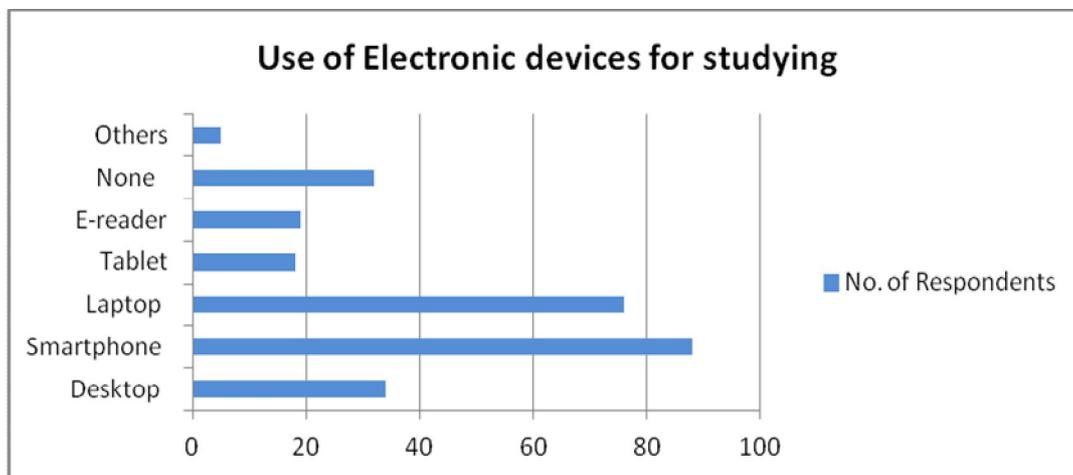


7. Electronic Device(s) used by respondents for Studying.

Device	No. of Respondents	% of Respondents
Desktop	34	17
Smartphone	88	44
Laptop	76	38
Tablet	18	9
E-reader	19	9.5
None	32	16
Others	5	2.5

**Findings:** 17 % of the respondents used desktop computers to study, 44 % of the respondents used smart phones, 38 % of the respondents used laptops, 9 % of the respondents used tablets, 9.5% of the respondents used E-readers and 16 % of the respondents did not use any electronic device.

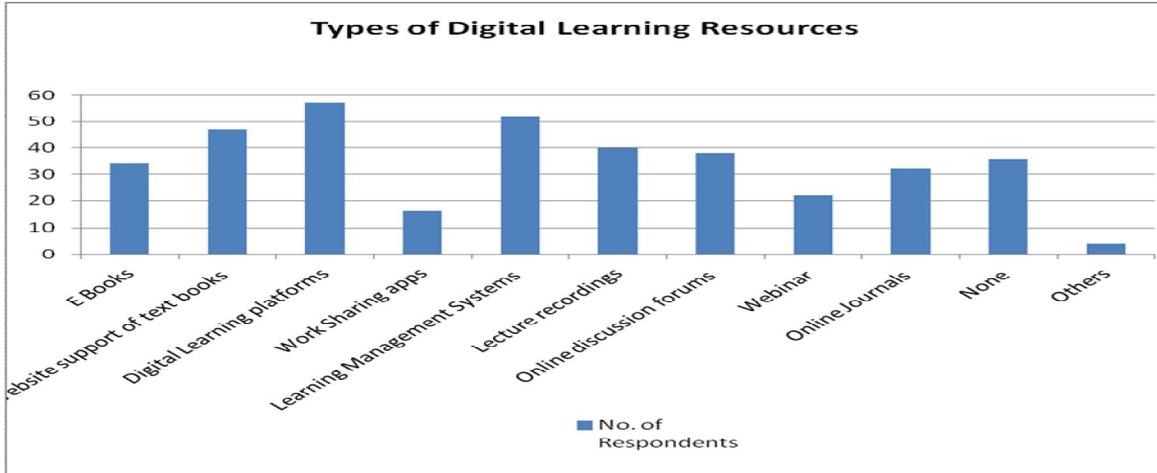
Some respondents may prefer using multiple devices.



8. Types of Digital Learning Resources used by respondents.

Digital Learning resources	No. of Respondents	% of Respondents
E Books	34	17
Website support of text books	47	23.5
Digital Learning platforms	57	28.5
Work Sharing apps	16	8
Learning Management Systems	52	26
Lecture recordings	40	20
Online discussion forums	38	19
Webinar	22	11
Online Journals	32	16
None	36	18
Others	4	2

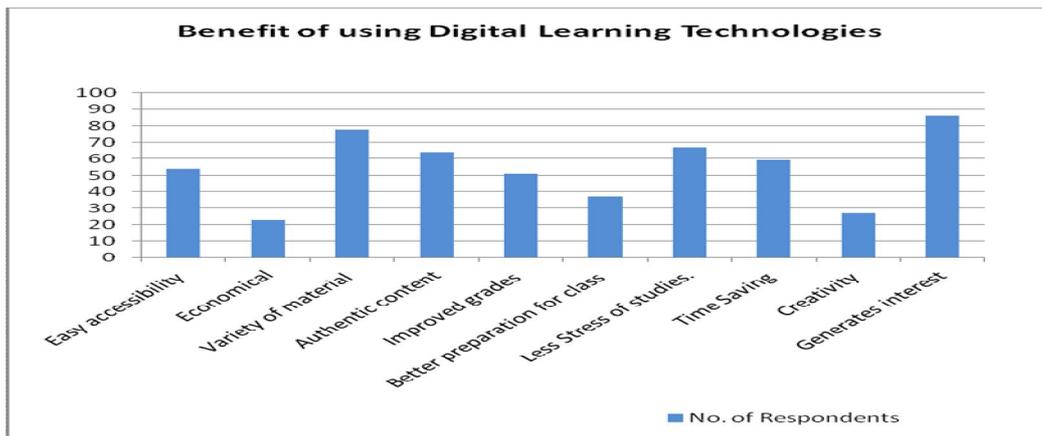
**Findings:** 17 % of the respondents used E-Books to study, 23.5 % of the respondents used Website support of text books, 28.5 % of the respondents used Digital Learning platforms, 8 % of the respondents used Work Sharing apps, 26% of the respondents used Learning Management Systems , 20 % of the respondents used Lecture recordings, 19 % of the respondents used Online discussion forums, 11% of the respondents used webinars, 16% of the respondents accessed online journals, 18% did not use any resource and 2% used other resources. Some respondents may prefer using multiple learning resources.



9. Benefits provided by digital learning technologies.

Benefits provided by digital learning technologies	No. of Respondents	% of Respondents
Easy accessibility	54	27
Economical	23	11.5
Variety of material	78	39
Authentic content	64	32
Improved grades	51	25.5
Better preparation for class	37	18.5
Less Stress of studies	67	33.5
Time Saving	59	29.5
Creativity	27	13.5
Generates interest	86	43

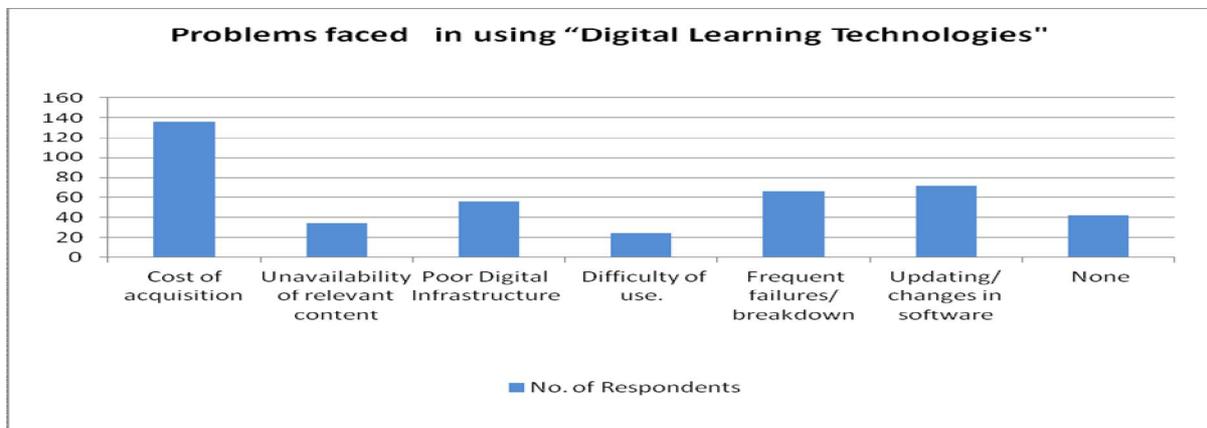
**Findings:** 27 % of the respondents said easy accessibility was the primary benefit of using Digital technology , 11.5 % of the respondents said it was economical, 39% said that a variety of study material was available,32% said the study material was authentic, 25.5% said that it helped them improve their grades, 18.5% said that it helped in better preparation for classes, 33.5% said that it was less stressful, 29.5% said that it helped in saving time, 13.5% said that it was creative and 43% believed that it helped in generating interest. Some respondents may have indicated multiple benefits.



10. Problems faced by students in using “Digital Learning Technologies”

Problems faced in using “Digital Learning Technologies	No. of Respondents	% of Respondents
Cost of acquisition	136	68
Unavailability of relevant content	35	17.5
Poor Digital Infrastructure	56	28
Difficulty of use	24	12
Frequent failures/ breakdown	66	33
Updating/ changes in software	71	35.5
None	42	21

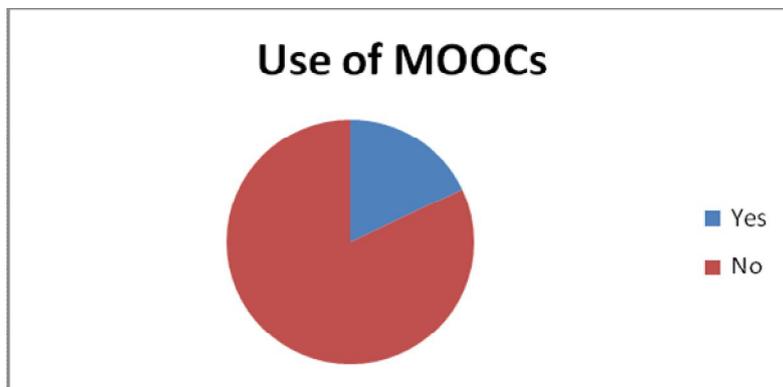
**Findings:** Regarding the problems faced in using Digital Learning Technologies 68 % of the respondents said that it was cost of acquisition, 17.5% said that it was unavailability of relevant content, 28% said that it was Poor Digital Infrastructure, 12% said that it was difficulty of use, 33% said that the main problem was frequent failures/ breakdown, 35.5 % said that it was Updating/ changes in software 21% of the respondents did not face any problems. Some respondents may have indicated multiple problems.



11. Use of MOOCs (Massive Open Online Course)

Use of MOOCs (Massive Open Online Course)	No. of Respondents	% of Respondents
Yes	36	18
No	164	82

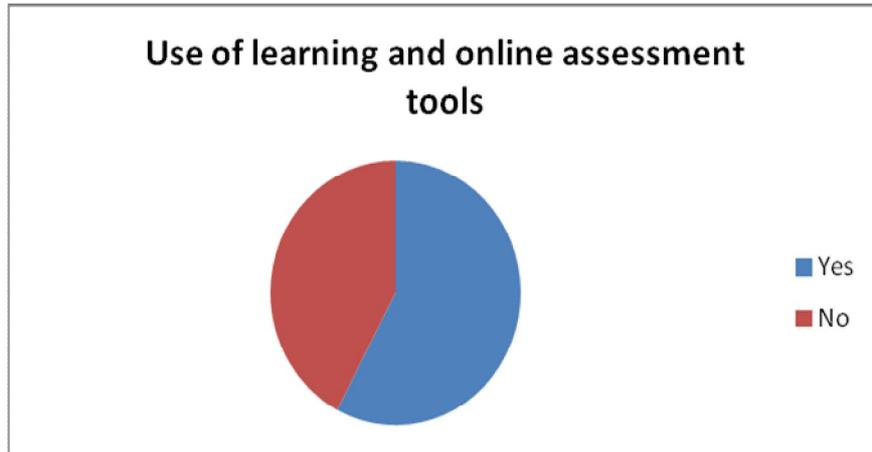
**Findings:** Only 18% of the respondents were using any MOOCs programme for learning.



12. Use of learning and online assessment tools like Google classrooms by institutions.

Use of learning and online assessment tools	No. of Respondents	% of Respondents
Yes	117	58.5
No	83	41.5

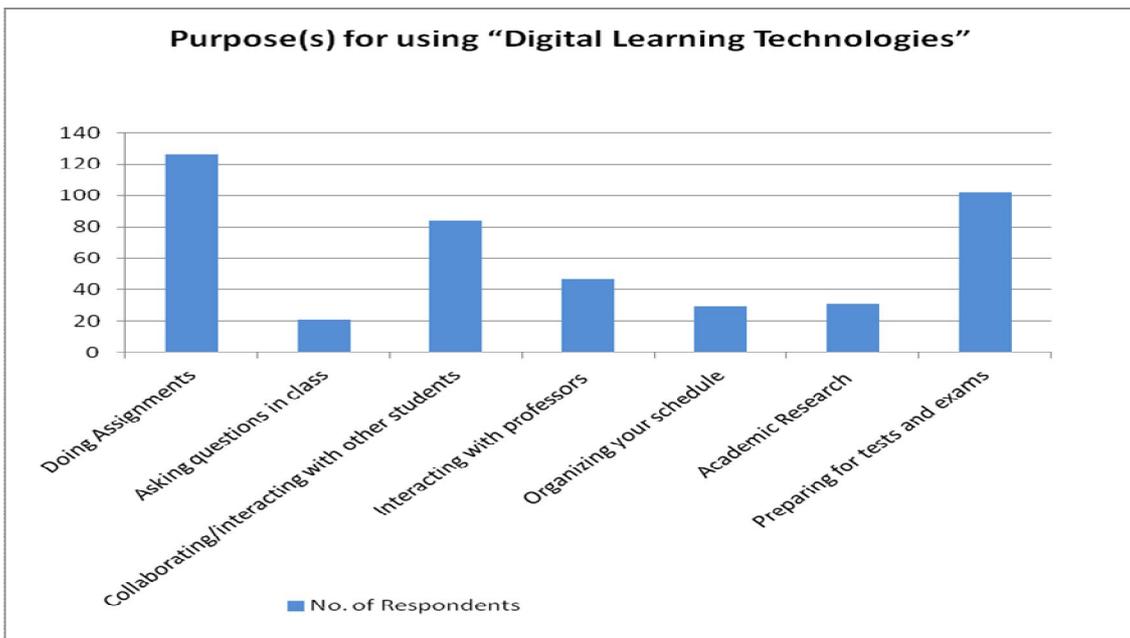
**Findings:** 58.5% of the respondents were using online learning and assessment tools



13. Purpose(s) for using “Digital Learning Technologies”

Purpose(s) for using “Digital Learning Technologies”	No. of Respondents	% of Respondents
Doing Assignments	126	63
Asking questions in class	21	10.5
Collaborating/interacting with other students	84	42
Interacting with professors	47	23.5
Organizing your schedule	29	14.5
Academic Research	31	15.5
Preparing for tests and exams	102	51

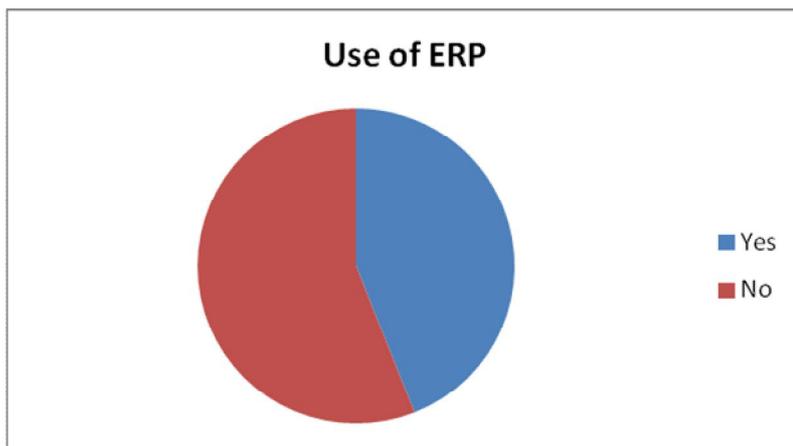
**Findings:** Regarding the purpose for using Digital Learning Technologies 63 % of the respondents used for preparing assignments, 10.5 % used it for asking questions in class, 42% used it for Collaborating/interacting with other students, 23.5% used it for Interacting with professors, 14.5% used it for Organizing their schedule, 15.5 % used it for Academic Research and 51% used it for preparing for tests and exams. Some respondents may have indicated multiple uses.



14. Use of ERP software

Use of ERP software	No. of Respondents	% of Respondents
Yes	88	44
No	112	56

**Findings:** 44% of the respondents were using ERP software, while 56% were not using it.

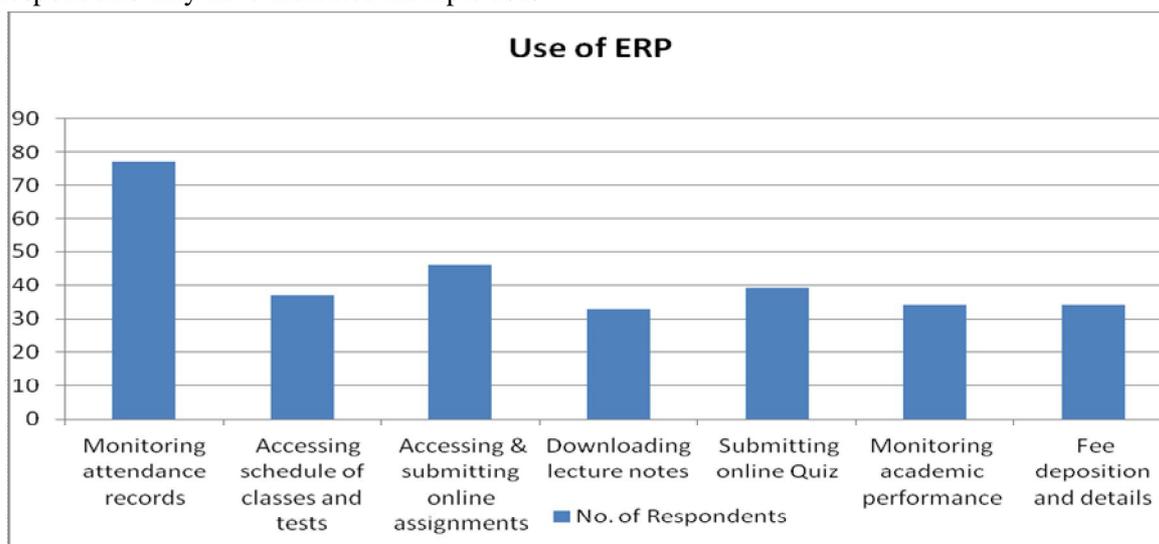


15.Purposes for using ERP

Purposes for using ERP	No. of Respondents	% of Respondents
Monitoring attendance records	77	87.5
Accessing schedule of classes and tests	37	42
Accessing & submitting online assignments	46	52.3
Downloading lecture notes	33	37.5
Submitting online Quiz	39	44.3
Monitoring academic performance	34	38.6%
Fee deposition and details	34	38.6

**Findings:** Regarding the purpose for using ERP 87.5 % of 88 respondents used for monitoring attendance, 42% used it for accessing schedule of classes and tests, 52.3 % used it for accessing & submitting online assignments, 37.5% used it for downloading notes, 44.3% used it for submitting online quiz, 38.6% used it for monitoring academic performance AND 38.6% used it for fee deposition details.

Some respondents may have indicated multiple uses.



**CONCLUSIONS**

Based on the above study, the following conclusions may be drawn:

1. Majority of students of higher education prefer to study at home.
2. Majority of the students spend 8-12 hrs a week for studying.
3. Smart phones and laptops were the most preferred digital devices used for studying.
4. 16% of the students surveyed did not use any digital devices used for studying.

5. Digital Learning platforms, Learning Management Systems and website support of text books for the most preferred types of digital learning resources being used by the respondents.
6. Respondents indicated that generating interest, variety of study material and less stress of studying were the main benefits of using digital learning technology.
7. Respondents of the study indicated that cost of acquisition and Updating/ changes in software were the biggest hurdles in using digital learning technology.
8. MOOCs is still not widely being used by students in Delhi –NCR region, as only 18% of the respondents were using it.
9. Learning and online assessment tools like Google classroom were being used by 58.5% of the respondents.
10. The most popular uses of digital learning technology among the respondents were for doing assignments and preparing for exams.
11. Only 44% of the respondents reported the use of ERP software by their institutions.
12. Students were using ERP mainly for monitoring attendance records and submitting online assignments.

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**GREEN MARKETING: A SYSTEMATIC REVIEW OF LITERATURE****Mudasir Raja<sup>1</sup>, Asif Amin Kuchey<sup>2</sup> and Sher Jahan Khan<sup>3</sup>**Research Scholar<sup>1,3</sup>, Department of Management Studies, University of Kashmir, Srinagar, J&K  
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**1. ABSTRACT**

*In today's contemporary business environment, a significant challenge facing organizations is related to the effect of their activities on the natural environment and developing in a sustainable way. Green Marketing has become an important phenomenon all over the world as the concerns regarding the environment have increased in the past few decades. Across industries, organizations are leaving no stone unturned in marketing green products and services in addition to their green initiatives and green attributes. The society has become more anxious with the environment. The increasing apprehension among purchasers towards the environment has forced business organizations to create improvements in their marketing strategies and as such organizations are adjusting their behavior in an attempt to deal with society's "new" concerns. Pertinently the organizations have responded in equal measure by emphasizing and incorporating these environmental concerns in their business activities. Witnessing the demand for eco-friendly products, many organizations have turned green and started practicing Green Marketing strategies. More and more organizations are increasingly focusing on the implementation of Green Marketing. This study presents a review of the existing literature to identify determinants of Green Marketing.*

*Keywords: Green Marketing, Green Products, Services, Natural Environment*

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**2. INTRODUCTION**

Customers in recent decades have growingly expressed concerns about the impact of products on the natural environment (Bhatia & Jain, 2013). Due to increasing appreciation among consumers with regard to environmentally-friendly products, appropriate marketing strategies are coming to being (Cherian & Jacob, 2012). Consumers have become aware of Green Marketing practices and organizations going green (Gupta, Shallu, & Kapoor, 2014) which has led to a shift in the way consumers lead their lives (Cherian & Jacob, 2012). When organizations uphold eco-friendly marketing practices and sustainable marketing plans these environmentally-conscious consumers are willing to walk the extra mile (Polonsky & Rosenberger, 2001). Consequently, they are becoming the primary target for green marketers (Rahbar & Wahid, 2011). Such pro-environmental attitudes and motivation to pay extra for eco-friendly products on the part of consumers is transformed into systematic green buying behavior (Heberlein & Black, 1976).

The green industry is driven by green consumers (Lu, Bock, & Joseph, 2013) and they not only demand green products but also want organizations to participate in green practices, such as recycling and energy efficiency (Montague & Mukherjee, 2010). Cairncross (1992) believes that growing Green Marketing and green consumerism is a major opportunity for the organizations have ever witnessed.

Several empirical studies have determined the importance and advantages of going green (Chen & Lin, 2011). A novel three zero paradigm is emerging, where organizations concurrently operate while ensuring zero waste and emissions, zero inventory, and zero defects (Florida & Davison, 2011). Taking due notice from the success of green organizations more and more organizations have started adopting it, making it more of a tactical maneuver to become competitive in the market rather than a voluntary response to environmental deterioration (Peattie, 1995). Organizations are scrambling to introduce products and services in the market which are positioned and promoted as addressing the needs of environmentally cognizant users. With organizations finding ways and means of being receptive to environmental concerns, Green Marketing has gained importance (Crane, 2000) and organizations have swiftly adopted concepts like environmental management systems (Chahal et al., 2014). The environmental performance on the part of organizations according to Miles & Covin (2000), has become an increasingly important component of an organization's reputation because of the ever-changing social, economic, and global environment since the 1990's. Green Marketing is a major trend in competitive business and, therefore, organizations may want to focus more attention on their different aspects when framing marketing strategies (Lu et al., 2013).

Although the practice of and research on Green Marketing is growing (Lu et al., 2013), less academic research has been conducted to develop the concept comprehensively (Chahal et al., 2014). The concept has undergone a tremendous transformation (Howard-Grenville, 2007). According to Peattie & Crane (2005), in many organizations, it is only the marketing or production department which has been given the responsibility of the

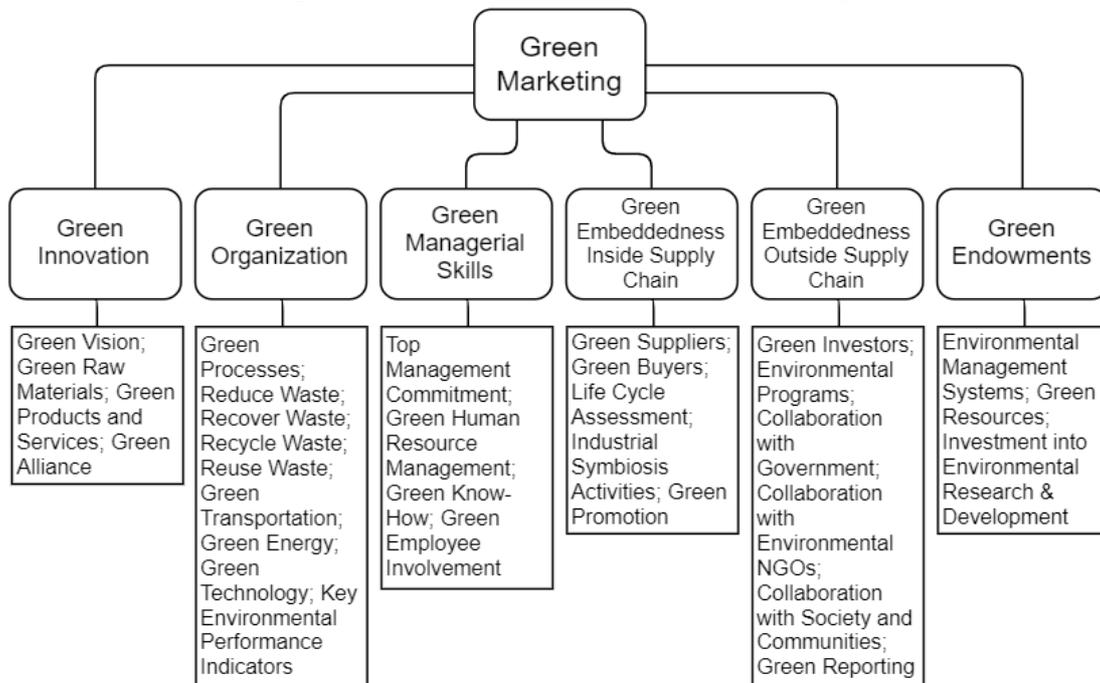
environment. They referred to this philosophically restricted view of marketing as “marketing department marketing” or “accountant’s marketing” or “formula marketing”. This myopic view of marketing has underpinned the philosophy behind Green Marketing inhibiting such organizations from undertaking a holistic and organization-wide approach to Green Marketing. Green Marketing, thus, entails an organization-wide approach since a business will essentially have to assimilate all of its activities together in line with ecological concerns (Ottman, 1998). Therefore, Green Marketing isn’t the duty of a particular department of an organization e.g. marketing department, production department, accounting department etc. In other words, it is a collective effort embraced by and made possible by all the departments of an organization working in unison towards one common outcome i.e. Green Marketing.

As Green Marketing isn’t limited to the pure marketing activities in an organization, it is important to determine what it constitutes when considering it as an organization-wide approach. These determinants of green marketing are discussed in the next section.

**3. DETERMINANTS OF GREEN MARKETING**

This has been achieved by a rigorous systematic review of the literature approach which leads to measurement variables and items to Green Marketing construct. Figure 1.2 gives a full view of the determinants of Green Marketing identified by review of the literature. They are discussed in Section 1.2.1.1 to 1.2.1.6.

**Figure 0.1 : Determinants of Green Marketing**



These determinants of Green Marketing and their underlying constituents are discussed from Section 2.6.3.1 to 2.6.3.6.

**GREEN INNOVATION**

Regular innovation is vital to deal with pressures related to the environment emanating from customers, competitors, and authorities (Porter & Linde, 1995). Therefore, it is imperative for organizations to embrace green innovation (Steger, 1993). Green innovation is concerned with; Green Vision (Constantinescu & Tănăsescu, 2014; Danciu, 2013; Lampikoski et al., 2014); Green Products and Services (Chen et al., 2006; Porter & Linde, 1995); and Green Alliance (Das & Teng, 2000; Hitt et al., 2000). These constituents of the first determinant of Green Marketing i.e. Green Innovation are discussed in Section 2.6.3.1.1 to Section 2.6.3.1.4.

**Green Vision**

Creating or having a vision is of the greatest importance in today’s competitive environment (El-Namaki, 1992). According to El-Namaki (1992), a vision is a “description of something (an organization, a corporate culture, a business, a technology, an activity) in the future”. To complement this definition Quigley (1994) defines vision as “the most fundamental statement of its values, aspirations, and goals, an appeal to its members’ hearts and minds”. He further adds that “it must indicate a clear understanding of where the corporation is today and offer a roadmap for the future”. Similarly, green vision aims to drive all the activities in an organization to proactively deliver a green value to its customers (Constantinescu & Tănăsescu, 2014). Such vision enables organizations to

adopt environmentally sustainable practices to not only create better organizations but also better relationships with customers (Danciu, 2013). Green vision allows an organization to select a value-creation strategy based on its scope of ecological activities assimilating all the elements of an organization with environmental sustainability (Lampikoski et al., 2014) and bonding its corporate culture and values with its ecological endeavors. Green vision is a corporation's statement of its green values, aspirations, and goals towards environmental sustainability. Green innovation in an organization is driven by a vision (Constantinescu & Tănăsescu, 2014) allowing it to go beyond mere compliance with the environmental regulations and gives it a pro-active attitude towards environmental management.

### **Green Raw Materials**

Green raw materials are those which not only generate the lowest level of pollution while using them to develop the final product but also utilize the lowest amount of energy and resources for doing so and that the quantity of their quantity used in developing the final product is also low (Lai et al., 2003; Wen & Chen, 1997). This creates double-cost savings for organizations as both the materials needed and the waste generated is reduced (Polonsky, 1994). Innovations like green raw materials, which reduce the use of material per unit of output render a positive impact on the competitiveness of an organization (Ghisetti & Rennings, 2014).

### **Green Products and Services**

A green product or service is recognized as one which is ecologically friendly (Ottman, 1998). It is believed to be green if it functions in an environmentally cleaner manner; possesses ecological efficiency or saves energy through efficiency (Shi & Kane, 1995). These products and services are manufactured or delivered through green technology and themselves don't cause any environmental hazards (Mishra, 2014). Katiyar (2015) characterizes green products as recyclable and reusable products that neither harm nor cause any pollution in the environment; have environmentally-friendly packaging and natural ingredients. These green products and services have characteristics like recyclability, less pollution, economy of resources, stimulate consumer emotions, such as protective sensitivities toward the environment (Bei & Simpson, 1995). They strive to safeguard or improve the natural environment by saving energy and/or resources and minimizing or terminating the use of toxic agents, pollution, and waste (Ottman, 1993).

### **Green Alliance**

Certain environmental problems are too complex to be dealt with alone and as such strategic alliances are formed, which are inter-organizational and collaborative efforts between organizations with regard to sharing or co-development of goods or services (Das & Teng, 2000; Hitt et al., 2000). These alliances are agreements to pool and exchange assets and resources (Stuart, 1998). Organizations gain new environmental skills and reputation from these green alliances (Crane, 1998). They are used as means for strategic association (Shah, 2011) and can bring several benefits to the organizations ranging from risk sharing between partners (Hitt et al., 2000), to create corporate status (Stafford et al., 2000), to create access to unique green resources or skills and to enter into new markets (Crane, 1998; Lin & Darnall, 2010).

### **GREEN ORGANIZATION**

Green Organization is concerned with Green Processes (Chiou et al., 2011; Nowak et al., 2011), Reduce Waste (Charter, 1992; Ginsberg & Bloom, 2004), Recover Waste (Green et al., 2012), Recycle Waste (Lozada, 2000; Prakash, 2002), Reuse Waste (Mishra, 2014; Charter, 1992), Green Transportation (Björklund, 2011; Rao & Holt, 2005), Green Energy (Peattie & Charter, 1994; Zarnikau, 2003), Green Technology (Lash & Wellington, 2007; Shrivastava, 1995b), and Key Environmental Performance Indicators (Hermann et al., 2007). These constituents of the second determinant of Green Marketing i.e. Green Organization are discussed in Section 2.6.3.2.1 to Section 2.6.3.2.9.

### **Green Processes**

A green process is that reduces the negative impact on the environment during material acquisition, production, and delivery (Chiou et al., 2011). Reducing the environmental effects of a business's processes is a daunting challenge faced by the organizations (Nowak et al., 2011). According to Nowak et al. (2011), organizations make their processes green in several ways: green compensation (creating a new process to set-off environmental impact of original process); green variant (replace original process with a greener process); resource change (changing the resource required by the process to a greener one); green feature (add a green feature to a process); common process improvement for environmental aspects (processes are optimized based on key environmental performance indicators); process automation (automated optimization from environmental perspective); human process performance (identifying processes to be performed by humans to reduce environmental impact); outsourcing (outsourcing processes to organizations with better environmental capabilities); Insourcing (centralization of processes and activities to decrease environmental effects).

**Reduce Waste**

According to Charter (1992), a green strategy concerned with products could occur when it generates less disposable waste and when such waste is reduced. Product and process optimizations have led to a reduction in waste (Ginsberg & Bloom, 2004). Organizations that reduce inputs that may generate waste get cost advantages (Cronin, Smith, Gleim, Ramirez, & Martinez, 2011). As opposed to past times when organization used to focus on treating waste produced, they have shifted to reducing that waste in the first place (Cronin et al., 2011) creating processing efficiencies and thereby attracting environment-friendly consumers (Ashford & Heaton, 1976; Porter & Linde, 1995).

**Recover Waste**

Environment-friendly products necessitate that manufacturers design them to facilitate the recovery of component materials and parts after use so that they can be recycled used again in manufactured (Green et al., 2012). Waste recovery involves recovering metals, particulates, precipitation, hazardous waste (heavy metals and chemical), used materials (e.g. rubber tire retrieval and reprocessing), packaging waste, household wastes, etc. (Fisk, 1998). Reverse logistic channels are developed to recover used materials or waste across the supply chain (Polonsky, 2011) enabling the extraction of value from waste products. Waste recovery is similar to investment recovery aiding organizations to dispose of their waste and in the most money-making manner (Min & Galle, 1997). The role of marketing has transcended to get more and different sections of consumers to contribute to the materials recovery tasks (Sharma et al., 2010).

**Recycle Waste**

Environment-friendly design requires that products are designed in a way so that they can be recycled i.e. reprocessed and transformed into the raw material which is then used to make the same or different products (Prakash, 2002). Products are manufactured keeping in mind their disassembly (Lozada, 2000), enabling organizations to recycle the waste generated thereof. Recycling of parts of their products has been found to be a valuable source of income by many organizations as it helps them reduce ecological costs by making products by creating products from recycled ingredients (McConocha & Speh, 1991). It empowers organizations to comply with waste regulations and assists in creating sustainable environments (Sharma et al., 2010).

**Reuse Waste**

One of the three Rs of environmentalism is “reuse” (Mishra, 2014). Charter & Polonsky (1999) mention that a green strategy concerned with products can take place by way of reuse i.e. designing a product so that it can be used multiple times. A product is environment-friendly when it is designed to be reused for other purposes (Manaktola & Jauhari, 2007). Reuse of by-products of organizational processes also results in large gains to the organizations (Curzons et al., 2001) in the form of avoiding costs of disposing of those wastes. Greening also involves remanufacturing the product to its original conditions or claim suitable components for reuse (Chiou et al., 2011).

**Green Transportation**

Acquiring environmentally-friendly transportation services is important as transportation is associated with a large number of environmental threats and issues (Björklund, 2011). According to Björklund (2011), green transportation is that which “has a lesser or reduced negative impact on human health and the natural environment when compared with competing transportation services that serve the same purpose”. Environmental initiatives in a supply chain encompass inbound as well as outbound transportation, among other things (Rao & Holt, 2005). In eco-friendly transportation, mode of transportation (pipelines, ship, plane, rail, truck, or barge etc.), fuel type and source (electricity, bio-fuel, fossil fuels, etc.), transportation equipment (type and size), operational activities concerned with transportation and its organization (facility location, speed, routes etc.) etc. can have a huge impact of transportation on the environment (Kam et al., 2006).

**Green Energy**

Green energy is not only concerned with generating energy from eco-friendly sources (Zarnikau, 2003) such as solar panels, biomass plants, geothermal projects, and wind farms, but also by conserving and using less energy (Peattie & Charter, 1994; Prakash, 2002). Besides generation and consumption, green energy also encompasses, distribution and transmission of energy (Richter, 2013). Firms are using energy footprint analysis to optimize their energy generation and consumption methods (Nidumolu et al., 2015). Renewable power has been found to lower operating and production costs. Reducing the use of energy for heating, lighting, industrial, etc. is one way of reducing costs (McNall et al., 2011; Peattie & Peattie, 2009)

**Green Technology**

Green or environmental technologies are equipment, methods, and procedures that use less energy and natural resources; reduce the impact of business processes on and protect the natural environment (Shrivastava, 1995b). Green technology encompasses machines and equipment's used in different business processes. They are capable of helping organizations generate huge revenues and also save economic and environmental costs (Lash & Wellington, 2007). According to Lash & Wellington (2007), these eco-friendly technologies can create green products and services; green supply chain; green reputation; compliance of environmental regulations; and stop or alleviate degradation of the natural environment. Environmental technologies can fundamentally effect environmental risks, impact, and costs of organizations (Kotha & Orne, 1989).

**Key Environmental Performance Indicators (KePI)**

Organizations need the means to measure how they are performing environmentally (Hermann et al., 2007). Evaluation of ecological performance of different activities and processes in an organization is performed using Environmental Performance Indicators (Carlson, 2002). Organizations use air emissions, waste generation, water usage, and energy usage as indicators of environmental performance (Azzone et al., 1996; Walls et al., 2008). In the absence of definite and quantifiable dimensions to measure the environmental performance of organizations, environmental management will only remain a rhetoric (Carlson, 2002). Data collected for these indicators over the years can be used to compare environmental over the years or against certain targets thereby enabling organizations to determine if they are getting better or not (Hermann et al., 2007) and can even be used for inter-firm comparison of environmental performance.

**GREEN MANAGERIAL SKILLS**

Green Managerial Skills is concerned with Top Management Commitment (Azzone et al., 1996; Carter et al., 1998), Green Human Resource Management (Wehrmeyer, 1996), Green Know-How (Chan et al., 2014; Rothenberg, 2003), and Green Employee Involvement (Florida, 1996; Kornbluh et al., 1985). These constituents of the third determinant of Green Marketing i.e. Green Managerial Skills are discussed in Section 2.6.3.3.1 to Section 2.6.3.3.4.

**Top Management Commitment**

The commitment of the management of an organization has a direct and significant impact on organizations' commitment to any kind of innovation, especially green innovation (Azzone et al., 1996; Carter et al., 1998). It's the top management that brings new system initiatives by motivating and empowering the staff, facilitate their involvement in these systems and drive a cultural modification in the establishment (Zhu et al., 2008). Green Marketing is a broad-based organization-wide endeavor and as such, it warrants the support of senior-level managers (Zhu & Sarkis, 2004). Wee & Quazi (2005) recognized top management commitment as an important factor of environmental management. Responsiveness to environmental pressures is improved with top management commitment (Colwell & Joshi, 2013) as they are the ones who decide about and allocate resources.

**Green Human Resource Management**

The concept of Green Human Resource Management was pioneered by Wehrmeyer (1996) and it has gained importance because humans are considered to be important: for maintaining environmental management systems (Daily & Huang, 2001; Jabbour & Santos, 2008); adopting environmental practices (Brío et al., 2007; Graves et al., 2013); development of eco-friendly products (Govindarajulu & Daily, 2004); support the environment through environmental training (Brío et al., 2008; Daily et al., 2012). Different phases of human resource management especially recruitment, selection, training, performance assessment, and compensation are important and not only assist environmental management systems but also help in developing environment-friendly innovations (Govindarajulu & Daily, 2004).

**Green Know-How**

It was identified by Renwick et al. (2013) that employees possess tacit knowledge with regard to environmental management and valuing such knowledge is a key component of environmental management in the organization. Contextual process, intra-organizational and external knowledge of employees with regard to the natural environment is imperative in an organization for making environmental improvements (Rothenberg, 2003). Environmental knowledge, awareness, and concern of employees prompt environmentally-friendly behavior on their part (Chan et al., 2014). Green know-how of employees turns into green intellectual of a firm which according to Chen (2013) has a significant and positive relationship with a firm's Competitive Advantage.

**Green Employee Involvement**

According to Berry & Rondinelli (1998), employee involvement is necessary in order to make environmental

policies meaningful and environmental management turns out successful only if it is decentralized and every employee in the business is involved in its implementation. The criticality of involving employees in eco-friendly practices has been emphasized by Florida (1996) and Kornbluh et al. (1985). Ramus & Steger(2000) reveal that creative ecological solutions implemented by employees augment an organization's shift towards environmental sustainability. In fact, organizations' environmental responsiveness is enhanced due to employee involvement in the ecological improvement of its activities and processes (Kassinis & Soteriou, 2003). Such involvement can enhance the ecological performance of these organizations such as cutting wastes and emissions (Hanna et al., 2000; May & Flannery, 1995).

### **GREEN EMBEDDEDNESS INSIDE SUPPLY CHAIN**

Green Embeddedness Inside Supply Chain is concerned with Green Suppliers (Florida, 1996; Hall, 2000), Green Buyers (Green & Irwin, 1995), Life Cycle Assessment (Robins, 2000), Industrial Symbiosis Activities (Chertow, 2000), and Green Promotion (Haytko&Matulich, 2008). These constituents of the fourth determinant of Green Marketing i.e. Green Embeddedness Inside Supply Chain are discussed in Section 2.6.3.4.1 to Section 2.6.3.4.5.

#### **Green Suppliers**

Environmental performance of suppliers is becoming critical to make the supply chains greener (Hall, 2000; Sarkis, 2003). If suppliers don't perform well environmentally, the environmental performance of those organizations which purchase from them is going to get affected negatively (Faruk et al., 2001). Therefore, organizations cooperate and collaborate with suppliers to reduce emissions and waste; develop and implement environmental programs, innovations, and solutions; and conserve natural resources (Florida, 1996; Hall, 2000). A study conducted by Green et al. (1996) found organizations developing supplier assessment systems in order to environmentally evaluate their suppliers. Suppliers found below benchmark grades for such assessment were delisted as suppliers. Such evaluation ensures tenders to be awarded to organizations who care for the environment. Materials and process used in product design, supplier process evaluation and improvement increase their impact on environmental results (Walton et al., 1998).

#### **Green Buyers**

Since industries are composed of networks of organizations buying and selling from and to each other, the prospects of focusing on environmental opportunities in such transactions between these organizations are much greater than what transactions between organizations and individual consumers can offer (Green et al., 1996). While products of a firm are bought by other organizations (distributors, retailers, etc.) or by individual consumers for final consumption, they have an impact on the natural environment. The concern of organizations over such issues has created "end of pipe" solutions encompassing the buyers in the supply chain, ensuring waste and emissions involved in the sale and use of these products is reduced (Green & Irwin, 1995). Multinational organizations are integrating into their green supply chain, distributors and other stakeholders which are downstream of their supply chain (Ashley, 1993; Bergstrom, 1993).

#### **Life Cycle Assessment**

The concept of Life Cycle Assessment (LCA) is concerned with the scientific examination of the environmental effects of products or processes throughout the different phases of their life and offer guidance to decrease such effects. These assessments are based on parameters such as air, water, noise, soil pollution; energy consumption, waste generation etc. (Robins, 2000). It is the most representative and comprehensive instrument for quantifying and measuring a products' or processes' consumption of resources and their environmental impact during their existence (Jeong et al., 2010). LCA helps organizations minimize total life-cycle costs (environmental costs) of products and processes from their cradle to their grave i.e. R&D, design, prototyping, manufacturing, recycling, recovery, and disposal (Shrivastava, 1995b) thereby measuring their ecological liability. For example, Unilever (2010) conducted hundreds of life cycle assessments of their supply and customer chains in 14 different countries and with the help of external experts, partners, and suppliers, they developed innovated their products and systems in order to create a huge positive impact on the environment.

#### **Industrial Symbiosis Activities**

Industrial symbiosis is concerned with the mutually beneficial exchange of materials, energy, water, and by-products enabling organizations to form collaboration and symbiotic possibilities (Chertow, 2000). According to Mirata & Emtairah (2005), such activities can create environmental benefits (such as resource efficiency, reduced use of non-renewable resources and reduced emissions), financial benefits (such as less resource inputs, reduced waste management expenses, and income from by-product and waste sales); as well as social benefits (employment and clean and safe workplaces). In industrial symbiosis resource exchange can take the shape of (1) by-product reuse: waste of one organization is used by another as raw material (2) utility/infrastructure

sharing: usage of resources such as energy, water, and wastewater are shared by the organizations. (3) joint provision of services: organizations jointly provide ancillary services to other organizations (Chertow et al., 2008). According to Chertow (2000), it works on the principle that organizations together can achieve what they cannot individually and can be between co-located organizations or geographically distant organizations enabling organizations to create and industrial ecology to interfaces thereby reducing the impact on the environment. Significant environmental benefits for organizations are created by Industrial symbiosis (Jacobsen, 2006).

### **Green Promotion**

Green promotions like advertising, sales promotion, publicity, and personal selling not only with promote organizations' green products, services and processes to the consumers, but also motivate them to engage in green behavior (Haytko & Matulich, 2008). Green promotion in Green Marketing can create new possibilities of gaining Competitive Advantage (Rex & Baumann, 2007). It promotes a constructive image of an organization and expresses its apprehensions towards the natural environment and the society (Ottman, 1998). These promotions take any of the three ways: first, which address a relationship between a product/service and the biophysical environment; second, which promote a green regime by drawing attention to a product or service; third, which exhibit a corporate reputation of ecological responsibility (Sheth & Sheth, 2012).

### **GREEN EMBEDDEDNESS OUTSIDE SUPPLY CHAIN**

Green Embeddedness Outside Supply Chain is concerned with Green Investors (Barnea et al., 2005), Environmental Programs (Arora & Cason, 1995; Segerson & Miceli, 1998), Collaboration with Government (Prakash-Mani & Seabright, 2017), Collaboration with Environmental NGOs (Westley & Vredenburg, 1991), Collaboration with Society and Communities (Altman, 1999), and Green Reporting (Aerts & Cormier, 2009). These constituents of the fifth determinant of Green Marketing i.e. Green Embeddedness Outside Supply Chain are discussed in Section 2.6.3.5.1 to Section 2.6.3.5.6.

### **Green Investors**

Green investors are those who besides taking into account the 'normal' financial considerations of risk and return while investing also have ethical considerations (Barnea et al., 2005) that the organizations they are investing in do not harm the environment (Lewis, 2001). According to a study conducted by Lewis (2001) on green/ethical investors, the majority of them were found to be prepared to take a loss in order 'to put their money where their morals are. These green investors influence the investment decisions of the organizations they invest in ensuring that they stand up to their environmental commitments (Barnea et al., 2005) and reduce their impact on the natural environment (Ambec & Lanoie, 2008).

### **Environmental Programs**

The reasons behind organizations participating in environmental programs are: (1) to create an appeal to consumers who demand "green" products and are willing to shed more money for them (Arora & Cason, 1995); (2) to preempt government regulation (Segerson & Miceli, 1998); (3) to pursue regulatory relief from the authorities; and (4) to create a Competitive Advantage over opponents (Videras & Alberini, 2000). These environmental programs improve environmental performance (Khanna & Damon, 1999) by addressing the environmental concerns of citizens and other interest groups and also enable organizations to avoid costs concerned with environmental regulations (Baggott, 1986).

### **Collaboration with Government**

Organizations are urged by governments to reduce the potentially negative impact of their operations (such as environmental degradation, poor quality products, climate change, green gas emission) on society and the environment (Kotler, 2011). But nowadays collaboration of business organizations with governments has become a reality (Kahan, 2016) and a lot of progress has been made by the governments and organizations all over the world to work together in preserving the natural environment (Prakash-Mani & Seabright, 2017). According to Conservation International (2018), organizations and government agencies are creating mutual benefits by ensuring safe water and food; environmental awareness; encouraging environmentally sound policies and enabling government with scientific data on oceans, crops, forests, rivers, wildlife etc.

### **Collaboration with Environmental NGOs**

Organizations are building strategic bridges by collaborating with Non-Government Organizations which work for environmental development, conservation, and protection (Westley & Vredenburg, 1991). Firms' collaboration with environmental non-governmental organizations creates several benefits for corporations, the NGOs and the environment in particular (Shah, 2011). These collaborations for the sake of the natural environment have many underlying benefits for both the organizations and the NGOs. They are an improvement

in public relations; receiving specialized technical environmental assistance, building up the reliability of consumer in green products and services and their associated claims; increasing entry into new markets; educating consumers about major environmental issues (Coddington, 1993; Mendleson & Polonsky, 1995; Milne et al., 1996). The reason for NGOs is primarily the availability of funds to work for nature's cause (Milne et al., 1996).

### **Collaboration with Society and Communities**

Experts in philanthropy and community service believe that business could not be successful without a thriving community (Altman, 1999). The collaboration between corporations and communities include relationships with civic and other professional entities in the society, contributions, donations, volunteerism of employees, programs based on communities (Altman, 1999). Corporations can work towards environmental issues by partnering with communities (Lund-Thomsen, 2005).

### **Green Reporting**

Organizations use corporate communication media to react to public environmental pressures and communicate to the public and the society that their behavior is environmentally appropriate (Aerts & Cormier, 2009). They primarily use sustainability, environmental or annual reports to communicate to the public about their environment-friendly practices and achievements (Guidry & Patten, 2010). These reports are important channels for publicizing organization environmental endeavors and performance to its stakeholders (Cerin, 2002) and have become increasingly significant because of influence from both external and internal stakeholders to publish and report environmental performance (Guidry & Patten, 2010). In these reports organizations usually report water and energy usage, carbon dioxide emissions, and internal programs to enhance energy efficiency (Roca & Searcy, 2012).

### **GREEN ENDOWMENTS**

Green Endowments is concerned with Environmental Management Systems (Melnik et al., 2003; Morrow & Rondinelli, 2002) Green Resources (Hart, 1995) and Investment into Environmental Research & Development (Scott, 2005). These constituents of the sixth determinant of Green Marketing i.e. Green Endowments are discussed in Section 2.6.3.6.1 to Section 2.6.3.6.3.

### **Environmental Management Systems**

Melnik et al. (2003) and Morrow & Rondinelli (2002) say that organizations are embracing Environmental Management Systems (EMS) like the International Organization for Standardization's "ISO 14001". These systems are concerned with developing, implementing, managing, coordinating and monitoring corporate environmental activities to achieve two goals: compliance and waste reduction (Sayre, 1996). It not only improves the environmental performance of organizations but also the overall performance (Melnik et al., 2003). Donaldson (1996) reveals that adoption of Environmental Management Systems like ISO 14001 allows financial institutions, investors, insurance companies, and regulatory agencies to evaluate an organization's obligation to refining and enhancing environmental performance and reducing environmental risks.

### **Green Resources**

According to Hart (1995), the relationship between corporations and the natural resources are emerging as new sources of Competitive Advantage. He also revealed that corporate strategy will be entrenched in capacities that assist the environmentally sustainable economic activity. Green resources influence the adoption of a green strategy by a firm (Chan, 2005). Hart (1995) proposed three strategies associated with the natural resources of a firm in order to achieve Competitive Advantage: pollution prevention (reduce effluents, waste, and emissions), product stewardship (reduce cost throughout the life-cycle of products), and sustainable development (reduce the ecological burden of business growth and development).

### **Investment into Environmental Research & Development**

Environmental Research and Development (R&D) includes any R&D concerned with reducing or controlling the effects of emissions that could harm the natural environment (Scott, 2005). Organizations can enhance their environmental management position investing in environmental research regarding the environmental impact of their products, services, and processes (Scott, 2005; Walls et al., 2008) and environmental technologies for both pollution control and pollution prevention (Klassen & Vachon, 2003). The motivations behind such investments include corporate image building, regulatory preemption, and production cost savings (Maxwell & Decker, 2006).

**CONCLUSION**

This paper identified six determinants of Green Marketing. These determinants are Green Innovation, Green Organization, Green Managerial Skills, Green Embeddedness Inside Supply Chain, Green Embeddedness Outside Supply Chain, and Green Endowments. These six determinants in turn involve the following constituents - Green Vision, Green Raw Materials; Green Products and Services; Green Alliance; Green Processes; Reduce Waste; Recover Waste; Recycle Waste; Reuse Waste; Green Transportation; Green Energy; Green Technology; Key Environmental Performance Indicators (KePI); Top Management Commitment; Green Human Resource Management; Green Know-How; Green Employee Involvement; Green Suppliers; Green Buyers; Life Cycle Assessment; Industrial Symbiosis Activities; Green Promotion; Green Investors; Environmental Programs; Collaboration with Government; Collaboration with Environmental NGOs; Collaboration with Society and Communities; Green Reporting; Environmental Management Systems; Green Resources; and Investment into Environmental Research & Development.

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**CONTEXTUAL AMBIDEXTERITY AND ITS IMPACT ON FINANCIAL PERFORMANCE OF BANKS IN INDIA**

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**ABSTRACT**

*Contextual ambidexterity is of paramount importance in the present dynamic environment. Although studies on organizational ambidexterity and the impact it has on various performance outcomes is well documented, however, research on this construct has not gained pace in India, especially in the banking sector. Furthermore, researchers have argued various ways of achieving ambidexterity, but giving employees the choice to switch between exploration and exploitation is emerging as a promising idea. However, detailed studies on contextual ambidexterity and its relationship with other outcome variables could not be found. In this direction, this study examines contextual ambidexterity and its impact on financial performance utilising a structural equation model. The results reveal that contextual ambidexterity has a significant positive impact on the financial performance of banks in India, with banks in the private sector outperforming the public sector.*

*Keywords: Contextual Ambidexterity; Financial performance; SEM*

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**INTRODUCTION**

In scholarly research a topic emerges that grabs the attention of researchers and leads to a deluge of studies in the field. In organizational literature, organizational ambidexterity is one such topic. Defined as the ability of the firm to simultaneously pursue exploration and exploitation, it has emerged as a critical factor for short term profitability and long-term survival (Tushman & O'Reilly, 1996). In one of the earlier works on the concept, March (1991) found that the fundamental adaptive challenge confronting the organizations was the need to both exploit their existing capabilities and to explore for newer opportunities to ensure survival in the market. The problem with this balancing lies in the fact that organizations find it easier to exploit their existing capabilities to maximise their short-term gains, than to divert resources for exploring opportunities which are uncertain and could land the organization in trouble. However, without exploring newer opportunities in the marketplace the organization is doomed to fail. Given this argument, the objective of this study is to examine the organizational ambidexterity efforts in India and its impact on their financial performance. The study will also check for any difference in the relationship between these two constructs for public and private sector banks.

**LITERATURE REVIEW**

Organizational ambidexterity as proposed by Tushman and O'Reilly in 1996, is defined as the Firms' ability to pursue both exploration of new opportunities and exploitation of existing capabilities (O'Reilly & Tushman, 2004; Raischet *et al.* 2009; Sarkees & Hulland, 2009). Though this may sound very easy, but there is a huge debate going on as to how these contradictory goals can be achieved simultaneously. In one of the earlier studies on ambidexterity, Duncan (1976) suggested that firms needed to sequentially align their structures and strategies over time in order to accommodate for the requirements of innovation and efficiency. However changing strategies and structures in a sequential manner requires a lot of time and that might not transform a firm into a truly ambidextrous organization. The challenge here is to manage conflicts and interpersonal relations while developing a mechanism that facilitates switching between exploitation and exploration (Duncan, 1976; Floyd and Lane, 2000). O'Reilly and Tushman (2008) presented an alternative approach, termed as structural ambidexterity. They proposed that the trade-off between exploration/exploitation can be simultaneously achieved by using separate structural units with different internally aligned processes, competencies, cultures and systems. While they argue that this way an organization can simultaneously explore and exploit new opportunities, the challenge here is to coordinate explorative and exploitative activities across independent sub-units. Another way of achieving ambidexterity, called contextual ambidexterity, is by building a set of processes that allow individuals to decide how to divide their time between exploitative and explorative activities Gibson and Birkinshaw (2004). As it gears the whole firm towards exploring and exploiting activities, it avoids the coordination and transition costs due to structural and temporal separation (Simsek *et al.* 2009).

Ambidexterity is also positively associated with the performance of an organization. However, to leverage that performance a firm must allocate sufficient resources for exploration and exploitation (March, 1991; Gibson and Birkinshaw, 2004; Cao *et al.* 2009; Wei *et al.* 2014). Ambidexterity has a positive association with sales growth (Nobeoka & Cusumano, 1997; Geertset *et al.*, 2010; Caspin-Wagner *et al.* 2012), market valuation (Wang & Li, 2008; Uotila *et al.* 2008; Goosenet *et al.* 2012) and the overall performance of an organization (Gibson

&Birkinshaw, 2004; Burton, O'Reilly & Bidwell, 2012). As ambidexterity has a positive impact on the various organizational outcome variables, we hypothesize that:

H1: Contextual ambidexterity has a positive impact on the financial performance of banks in India.

**METHODOLOGY**

**Sample & Data Collection**

In this study, two separate samples were taken, one for pilot testing the instrument and the other to test our hypothesis. The first sample comprises of 130 junior and senior-level managers working across 14 major banks of India. The respondents in the first study were selected on a convenience basis but substantial diversity of respondents was ensured to increase the representativeness of our sample. In the second sample, the respondents were approached in person. Although the population in our study included all the banks operating in India but reaching each and every single bank was not possible. So, two private (HDFC Bank, Axis Bank) and two public sector banks (Canara Bank, Punjab National Bank) were selected at random through drawing lot. Out of 800, a total of 611 questionnaires were received back, out of which 96 had very low standard deviations. Upon close examination it was found that these respondents has filled in all questions with a five or four and were therefore discarded.

**Measures**

Ten items were used to assess Contextual Ambidexterity and the measures were adapted from Wang and Rafiq (2014). Financial Performance measures were measured with subjective measure as the other dimensions in this study were cross-sectional in nature and they needed to be regressed with Financial Performance for hypothesis testing. Furthermore there is well established literature on the positive relationship between subjective and objective assessment measures (Dess& Robinson, 1984; Venkatraman&Remanujam, 1987; Pearce *et al.* 1987). Accordingly Financial Performance was assessed by asking respondents to rate the performance of their organizations in comparison to average competitors in their sector, using five items taken from the following studies:

Scale items	Sources
Market Share	Deshpandé et al (1993); Avlonitis&Gounaris (1997)
Return on Investment	Greenley (1995); Avlonitis&Gounaris (1997)
Return on Assets	Narver& Slater (1990); Slater &Narver (1993, 1994)
Profits	Deshpandé et al (1993); Avlonitis&Gounaris (1997)
Revenue Growth	Wiklund&Shephard (2003)

The pool of items thus selected for this study was again tested for face and content validity before administering the same for data collection. The items in this study constituted the first part of the questionnaire while as, the demographic profile of the respondents were captured at the end of the instrument. A bipolar five point likert scale with anchor point ranging from strongly agree (5) to strongly disagree (1) was used to assess the respondents' level of agreement against 15 statement.

**Exploratory Factor Analysis**

Factor analysis was conducted using Maximum Likelihood with Promax rotation (Table 1) with suppression of small coefficients below 0.40. The KMO and Bartlett's tests were also conducted to assess the appropriateness of EFA and the sample size. The Kaiser-Meyer-Olkin quantifies the degree of inter-correlations among the variables with values above 0.6 considered acceptable (Tabachnick and Fidell, 2007). Bartlett's test on the other hand tests whether the correlation matrix is an identity matrix and the significance of our correlation matrix is tested at 5 per cent level of confidence. This test indicates whether factor analysis can be run i.e. items can be reduced to factors or not. In our analysis we got a score of 69.49 which is more than the threshold limit of 0.6 and the Bartlett's test was also statistically significant. Likewise, communalities were also assessed and no major issues were encountered.

Table 1: Exploratory factor analysis output

Scale items	Communalities	Eigen Values		
		37.11	57.15	69.49
CEP1	.596		.713	

CEP2	.788		.893	
CEP3	.708		.856	
CEP4	.667		.832	
CEP5	.602		.770	
CEX1	.662	.779		
CEX2	.794	.908		
CEX3	.836	.942		
CEX4	.833	.890		
CEX5	.771	.860		
FP1	.537			.739
FP2	.682			.814
FP3	.623			.795
FP4	.773			.882
FP5	.552			.727
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				<b>.873</b>
Bartlett's Test of Sphericity				<b>.000</b>
Extraction Method:	Maximum Likelihood.			
Rotation Method: Promax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

**Confirmatory Factor Analysis**

The exploratory factor analysis indicates the factor structure in a set of items and these factors are then again confirmed in the measurement model called confirmatory factor analysis (CFA). This technique is essential to determine the validity of the constructs and model appropriateness. There are many estimation methods available but the right technique can make a difference. The default estimation method in AMOS is maximum likelihood as it performs well in most of the cases even if the data violates normality assumption or when the sample size exceeds 500 (Tabachnick and Fidell, 2007; Hair *et al.*, 2010). The dataset, collected for testing the hypothesis of this study, was prepared in SPSS and CFA was conducted using AMOS version 23. The model fit indices (CMIN/DF = 1.861, RMR = 0.073, TLI = 0.931, CFI = 0.922, RMSEA = 0.058, PCLOSE = 0.188) are within the limits as recommended by various researchers.

**Common Method Bias**

Common method bias is the spurious “variance attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, et al., 2003). It can adversely impact the validity of our findings, leading to flawed conclusions (Campbell & Fiske, 1959). In this study we tested for method bias utilising the Harman’s single factor test and the results reveal that the common factor only explains 14 percent of the variance, which leads us to believe that CMB is absent in our model.

**Scale Reliability**

To test the reliability of our constructs, we used the composite reliability technique as Hair et al., (2010) see it as the most suitable measures for the assessment of reliability in a CFA model. As a value approaching 1 indicates greater internal consistency, the minimum threshold limit of 0.7 is necessary to achieve Composite Reliability (Field, 2009). The results for reliability (Table 2) indicate that all the constructs above 0.9 which is greater than the minimum threshold limit.

Table 2: Factor loadings, convergent validity and composite reliability

Construct	Item	Loadings	AVE	CR
<b>Exploration</b>	CEP1	0.89	0.97	0.94
	CEP2	0.90		
	CEP3	0.84		
	CEP4	0.87		
	CEP5	0.91		
<b>Exploitation</b>	CEX1	0.86	0.93	0.93
	CEX2	0.84		
	CEX3	0.81		

	CEX4	0.94		
	CEX5	0.86		
<b>Financial Performance</b>	FP1	0.78	0.85	0.91
	FP2	0.85		
	FP3	0.83		
	FP4	0.92		
	FP5	0.72		

**Validity**

To empirically test the validity of the confirmatory model two tests are performed, convergent and discriminant validity. Convergent validity was assessed through AVE and the scores of each construct, listed in the table (2) above clearly indicate that the minimum acceptable level of 0.5 has been achieved (Fornell and Larcker, 1981; Kline, 2011). On the other hand discriminant validity was assessed by following the criterion given by Fornell and Larcker (1981) which compares the square root of AVE with the latent constructs and the results (Table 3) indicate that our model is valid.

Table 3: Discriminant validity results

	<b>Exploitation</b>	<b>Exploration</b>	<b>Financial Performance</b>
<b>Exploitation</b>	<b>0.863</b>		
<b>Exploration</b>	0.706	<b>0.882</b>	
<b>Financial Performance</b>	0.470	0.410	<b>0.823</b>

**RESULTS & DISCUSSION**

To analyse our data and to test our hypotheses, we used Structural Equation Modelling (SEM) with contextual ambidexterity as our independent variable and financial performance as our dependent variable. Contextual ambidexterity was measured as higher-order factor of the underlying constructs, exploitation and exploration. The model fit statistics were well within the acceptable range (CMIN/DF = 1.18, CFI = 0.94, IFI = 0.91, TLI = 0.94, RMSEA = 0.04, SRMR = 0.05). The standardised path coefficient from ambidextrous organizational culture to Contextual ambidexterity is 0.59 and is significant at  $p < 0.01$ , which supports our hypothesis. We also conducted a Multi-group analysis to further assess the relationship between contextual ambidexterity and financial performance for private and public sector banks. The results indicate (Table 4) that contextual ambidexterity has a higher effect on financial performance of private sector banks in comparison with the public sector banks. So it is evident from the results that private sector banks’ ambidexterity efforts are on track and it has a higher effect on their financial performance. Although public sector banks ambidexterity efforts are yet to catchup with their private sector competitors but the overall picture needs to improve for both public as well as private sector. This study highlights the importance of ambidextrous organizations and provides support to the idea that organizations across sectors and national borders need to put in extra effort to become ambidextrous, so that they can stay ahead of the competition.

Table 4: Multi-group analysis

		<b>Private Banks</b>	<b>Public Banks</b>	<b>Z score</b>
<b>Financial Performance</b>	← <b>Contextual Ambidextertiy</b>	0.74**	0.39***	1.86*

This study has its limitations. First, this study examined the relationship between contextual ambidexterity and financial performance using perceptual data. Although there is sufficient literature support for using perceptual performance measures, however, there is a need to revalidate the findings of this study using objective performance measures. Future researchers can use objective measures of performance especially by utilizing a longitudinal research design. Second, limitation of this study lies in the sampling plan. This study was conducted at four major metropolitans only. Further, this study has taken into consideration only four banks due to various resource and time constraints, so the findings of this study need revalidation. Researchers may include foreign banks in addition to the public and private sector banks from tier-I, II and III cities in their sample and re-examine the relationship between contextual ambidexterity and financial performance using multi-group analysis.

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**ROLES OF HIGHER EDUCATION IN SOCIAL TRANSFORMATION**

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**ABSTRACT**

*The educational institutions, colleges and Universities across the globe are undergoing a paradigm shifts and inventing new technologies and methods to bring social transformation. There are tremendous changes in education tools and methodology from Black-board concept to Smart Board concept and from simple class room lectures to online webinar lectures. The problem is whether education system in India is contributing in social transformation; if yes, whether it has an impact on sustainable development in India.*

*The objective of this research is to examine the roles of higher education in social transformation in India and other important factor for it. Three hundred respondents inclusive of management students, faculty, and administrative staff at a business school in Delhi/NCR were surveyed to investigate and to test the hypotheses framed, whether Good education system, Family environment & Culture, Science and technology, Political Factors, demographic factors, physical environment, and Economic Factors are considered important by these respondents in the transformation of society.*

*The results revealed that, according to the sample respondents, good education system, science & technology and economic factors play the most important role in bringing about a transformation in the society. Family environment & Culture, physical environment and demographic factors were also considered to be somewhat important for transformation of society. However, surprisingly, political factor was not considered to be vital by a large part of these respondents and reject the alternative hypothesis that political factor has an important role to play in societal transformation.*

*Keywords: Sustainable development, higher education, social transformation*

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**INTRODUCTION**

Role of Education in social transformation has been very momentous since the inception of India. Even for the Kings and their kid in different regime the education system has been of great importance. Indian history has large number of examples where education significantly contributed for the development of people, society and nation i.e. Mahabhartha, Ramayana, Chanakya etc. are some name examples of good education system and the same legacy continued till date. In the past three decades the world is experiencing paradigm shifts in development and growth of people, society and nation. The professionals, researchers have been genuinely interested to explore more new realities and facts in this regard. Though there have been large number of research but researchers could not identify any research in Delhi NCR on important factors important for the development of people, society and nation. Though education is a fundamental right and in some of the countries it has played very significant role in the progress and development. It is a proved fact that affluent countries depend on skilled and educated workers. The challenges of dominant poverty, fighting climate change and achieving truly sustainable development in the coming decades force us to work together. With partnership, leadership and wise investments in education, we can transform individual lives, national economies and our world. — BAN KI-MOON, UNITED NATIONS SECRETARY-GENERAL “

The globalization has inclined the transformation in environment, economic and financial conditions. But these changes were not possible without insertion of innovative solutions, universal value to human dignity, gender equality, non-discrimination and non-violence. In other words the social transformation means a process of bringing progressive changes among the people and society towards human values, economic and financial developments, bringing non-violence and non-discrimination. In return the people of that society, state and nation would be transformed towards development and prosperity. Undoubtedly, the young populations who are directly affected by these advances in any nation are the key plays of social transformation. Social transformation is the process by which an individual alters the socially ascribed social status of their parents into a socially achieved status for themselves. However another definition refers to large scale social change as in cultural reforms or transformations.

Its emphasis of parliamentary democracy, justice, freedom and equality comprise the fundamental values to which all other process of social change – the economic, social and cultural should be subordinated. The main structures concerned are the social stratification, political system and the cultural ideology. Caste comprises the central principle of social transformation and traditionally it enjoyed great deal of internal autonomy. The

process of social change ushered in by the British rule set into motion social and cultural dynamics that started reorganization of structural pattern of traditional Indian society.

**RESEARCH METHODOLOGY**

**Research Objective**

The objective of this Research is to study the role of higher education in social transformation in India and other important factor for it.

**Hypotheses**

H1: Good education system is important for transformation of individual person & Society

H2: Family environment & Culture play important role in transformation of society

H3: Science and technology is important for transformation of society

H4: Political Factors are important for transformation of society.

H5: Economic Factors are important for transformation of society.

**Research Design**

This research paper is based on descriptive research design.

**Research Instrument used to collect the data:**

Questionnaire and Personal Interview instruments have been used to collect the data for achieving the objective of this paper. However, secondary data has also been used in this research

**Sampling Technique**

Systematic and Random sampling technique has been used in this research paper.

Sampling Unit: 300 people (aged from 20 to 50 years) from Delhi NCR, India

**Sampling Frame**

Delhi and National Capital Region of India is the sampling frame for this study.

**Measurement Scale**

Likert three point scales have been used as measurement scale.

**Data Analysis:**

Once relevant data is collected, it was managed systematically, edited and analyzed as per the requirement of the objective of this study. The data analysis is detailed below with the help of tabulation:

S.No.	Statement	Positive	Uncertain	Negative
1	Do you think good education system is important for individual person & Society	95%	3%	2%
2	Do you think family environment & Culture play important role in transformation of society	60%	35%	5%
3	Do you agree that physical environment is important for transformation of society	70%	28%	2%
4	Do you think that demographic factors important for transformation of a society	60%	30%	10%
5	Do you think that science and technology is important for transformation of society	85%	10%	5%
6	Do you think that economic factors important for transformation of society	90%	7%	3%
7	Do you think that political factor is important for transformation of society	40%	10%	50%

**Hypotheses Testing**

The hypotheses framed to achieve the objective, were tested on the outcome of data analysis and results are as under:-

H1: Good education system is important for transformation of individual person & Society is <b>Accepted.</b>
H2: Family environment & Culture play important role in transformation of society is <b>Accepted</b>
H3: Science and technology is important for transformation of society is <b>Accepted</b>
H4: Political Factors are important for transformation of Society is <b>Rejected.</b>
H5: Economic Factors are important for transformation of society is <b>Accepted</b>

**CONCLUSIONS**

The survey covered respondents of different genders, educational qualifications, ages and household income belonging to different area of Delhi NCR. This study has brought to light certain interesting findings about the important factors in social transformation in India. The study identified seven important factors, which contribute in the development of the people, society and nation as a whole. These factors are education system, family environment, demographic factors, science and technology, demographic factors, economic factors and political factors. The study revealed that these factors are important for the development of the society and further advocates that some factors are critically important for the development of the society while some other factors are less important. Good higher education System, economic factors and advancement of technology are the highly voted factors important for the development of people and society followed by physical environment, demographic factor, family environment and culture and political factor are less important for the development of a society as compare to first three factors. The role of institutions of higher learning in enhancing sustainable development and in promoting the interests of the nation has been recognized worldwide. One only needs to cite the fact that many of our reputable men and women in different walks of life are products of institutions of higher learning. Institutions of higher learning stand at the apex of the education system as a place for the pursuit and dissemination of knowledge, skills, attitudes and values.

After study of the essential facts and figures in this research, it is also concluded that education in India is a very important tool for developing the bright future of the people. The bright future and prosperity and social recognition can be achieved with good education system in any country. It is a proved fact that education helps the people to develop positive attitude, solve big personal and social problems and remove all other problems. It is evident in the developed economies across the globe, education not only brings positive thoughts but also provides opportunities to gain technical and skilled knowledge, use of advance technology for qualitative and quantitative results. A Good education system and practices in any nation, makes its citizens, a good doctor, engineer, officers, teachers etc. In last it is concluded that education system in any economy plays very significant role in social transformation. For example the countries where education is given important are developing with very fast pace and countries where education is neglected are poor performer in all respects.

**LIMITATION OF THE STUDY AND NEED FOR FUTURE RESEARCH**

Since the sample in this study have been conveniently selected, therefore, the finding of this study cannot be generalized because the opinion from the selected respondents and their geographical areas. Also the responses of the respondents were not variety. Doing so would have provided useful data that could have been used to validate the claim, hence the need for future research.

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**FAILURE OF ANNUAL PERFORMANCE REVIEW AND WAY FORWARD: A STUDY OF FEW SELECT COMPANIES**

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**ABSTRACT**

*The annual performance review has been a pervasive and, largely a dreadful fixture of the corporate world for quite some decades. In recent years, this century old practice has been weaning rapidly, the corporates have begun to realize that the annual review is not particularly good way to manage people or to boost their performance or to motivate them. The corporates are of the view that it leads to a tendency for HR to focus excessively on process over outcomes. Thus, more and more companies are getting rid of annual performance review lately, and with General Electric Company, that propagated the toughest form of formal annual review, joining the foray in 2015. Then, a high-level debate was kindled among the HR professionals about the usefulness of this practice and taking steps to develop alternatives. For decades, General Electric practiced a firm system, championed by then CEO Jack Welch, of ranking employees, commonly called "rank and yank". This system adhered on the annual performance review and brought the employees' performance down to a number on which they were judged and ranked against peers. But now, companies are going for a paradigm shift. They are abandoning formal annual reviews and as its substitute opting for a less rigid system of continuous feedback. General Electric with the decision to abandon annual performance review joins other high-profile companies, such as, Deloitte, Accenture, and Adobe, that have started dumping or have already gotten rid of formal annual reviews. And given the longstanding and pervasive influence, these companies had over the business world, this move could represent the beginning of the end for a practice, that has been at the core of how corporations have managed people for decades. This research paper aims to study the reasons why more and more companies are ditching the practice of annual performance review. It further examines the alternatives to performance review developed by these select few companies and make recommendations. In addition, it examines the need for implementation of the continuous flow of feedback and development of employees' professional skills in the workplace and understand it in the context of these companies by proposing a three-fold model of Performance review-3 Rs, Relate, Revamp & Recognize.*

*Keywords: Performance review, performance appraisal, continuous feedback, alternatives to Performance review, JEL Classification code: J62*

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**INTRODUCTION**

The annual performance review has long known as an ineffective and inefficient tool to develop and motivate employees. In 2013 SHRM conducted a study (6000 HR professionals in organizations with 500 or more employees) to understand what HR professionals' perceptions were of current performance management practices. Majority of the professionals interviewed said that the overall effectiveness of the annual performance review process was inefficient and damaging to employee motivation. However, the study also found that the majority (77%) of the companies interviewed still conducted performance reviews on an annual basis. Performance appraisal has been widely accepted to be a key tool in recognising an individual's achievements and, also as an important lever to mould people's ability and motivation into a long-lasting advantage. In the recent years, the concept of performance appraisal has transformed, traditionally, performance has been typically associated with annual appraisals that numerically size the entire year's work of an employee within a day or two. However, performance has a much broader scope that cannot be quantified by just a numeric based appraisal. The numbers that are, generally, the output of the appraisal system, are used by the leadership to decide on hosts of employee-specific development related issues such as role enhancement, inter-firm vertical movement and most importantly declaring the annual rewards and benefits. Thus, the year 2015 saw a number of Fortune 500 companies doing away with the system of performance reviews and replacing it with more pertinent- continuous feedback. Research indicates that employees do not want a review based on their yearly performance, but rather a frequent and helpful conversation that would assist them in their professional development. Innovative new performance management models are now becoming the need of the hour, as businesses modernize and improve their talent solutions. Companies leading this transformation are redefining the way they set goals and evaluate performances, focusing heavily on coaching and feedback and looking for new technologies to help make performance management easier. Where success in the workplace depends on businesses' ability to generate value from employees, performance management is sure to be a key enabler. A 2014 article titled, "Kill your performance ratings", found that 95% of managers were dissatisfied with their

performance management systems and only 23% of HR managers believed that their performance management system can achieve its stated objectives. According to a subsequent 2014 PwC global report, "Emerging trends in performance management", 89% of organizations observed that their people managers were unable or unwilling to initiate difficult conversations with their team.

### **RESEARCH OBJECTIVES**

This research paper aims to study the causes, as to, why more and more companies are ditching the practice of annual performance review. It further examines the alternatives to performance review developed by the corporates to replace the traditional ranking system, by taking case studies of few select companies such as Adobe, Accenture GE Electric, Deloitte and make recommendations. In addition, it examines the need for implementation of the continuous flow of feedback and development of employees' professional skills in the workplace and try to understand it in the context of these companies. Further, the paper aims to propose continuous and fluid model of reviewing the performance of the employees.

### **RESEARCH METHODOLOGY**

This research paper is a conceptual paper based on the analysis of various reports and research papers. Further, data has also been extracted from the various websites and news articles, analyzed and then corroborated.

### **FINDINGS & ANALYSIS**

In today's Knowledge age, organisation's performance is not tied to the completion of easily-measurable tasks, an individual's work is intertwined with the work of many other people, teamwork is as significant a factor as individual performance, if not more so, and thus, it doesn't make sense to evaluate employees at an annual performance review anymore. Performance management is a vital part of the employee experience. When done correctly, performance reviews should motivate employees to improve their performance by providing a consistent way to assess and select employees for promotion, transfer or alternate actions. According to a recent survey, 82% of employees appreciate receiving feedback, regardless if it's positive or negative. But when bias comes into play or an employee enters the process ready to battle any constructive criticism received, performance management of the people can hinder the performance of the organization.

The paper, thus tries to depict the perceived notion of the organizations about their current performance system.

The findings revealed the following pit-falls of the traditional performance review:

**1. Successful performance management requires the ability to see performance at a large scale.** While real-time feedback is beneficial for the employee and a trait of quality managers, if looked at without a view of overall performance, it has the potential to severely narrow the focus on how decisions surrounding that employee are made. Rather than basing decisions on an extended period of time, and potentially the entire tenure of the employee, decisions are made based on recent memory. It is important for managers to document where an employee excels and where an employee can improve throughout the year so they can discuss their performance on a large scale.

#### **2. Going overboard on monitoring**

Increased monitoring can make employees feel as if they have lost all independence in their roles. In an effort to protect themselves, they could become defensive and may even hide the challenges they are facing. When a manager sees this, they typically begin to monitor even more closely, continuing the cycle. A good manager will monitor performance while giving employees enough space to correct themselves. One survey of over 20,000 employees around the world reported that 92% of those who felt respected and trusted by their leader had greater focus and prioritization and 89% greater enjoyment and satisfaction in their jobs. Give your managers training and playbooks on how to strike the right balance between monitoring work and micromanaging. Focus, prioritization and job satisfaction contribute to the success of an organization and make for a more pleasant work environment.

#### **3. Rating employees on factors outside of job performance**

Traditional performance reviews often evaluate an employee's behavioural traits rather than measures directly related to their quality of work, financial value or work volume. While employee behaviour and attitude are a component that should be evaluated, it can lead to an introduction of bias. A manager may try their best to be objective, but if personalities clash, these behavioural-type questions makes this hard. Goal setting is vital so managers can effectively measure true performance.

#### **4. Using one standard assessment for every role**

Just as job descriptions are unique, so should be performance management assessments. Each assessment factor should also carry different weight based on its importance to the individual role. For instance, Customer service

representatives can be evaluated heavily on their communication skills, ability to handle conflict with grace and timely response to customer needs. Valuations about their creative problem solving may be less important. If you are using a standard assessment, you are drastically reducing the value of assessments while also making it impossible to understand challenges and successes of individual roles and departments.

### **5. Providing feedback that lacks substance**

Performance evaluations are conducted for the purpose of providing valuable feedback in the form of both commendations and recommendations. If an employee doesn't understand the rating scale or is met with generic comments rather than concrete ways in which they can improve their performance, the value of that appraisal is zero. Employees will leave feeling confused and unappreciated. Managers and employees should always provide goals that can be measured in the next review cycle. Performance evaluations offer opportunities for managers to take pause and let employees know what they do well and what they can improve on. High-performing employees get the recognition they deserve and those that are underperforming get a plan for improvement. Unfortunately, when these performance reviews fail to accurately measure employee performance, then they become ceremonial rather than essential. Companies need to bring the value to these reviews by providing managers with proper training on their execution and continually refining and revamping their processes.

- According to management research firm CEB (Corporate Executive Board), 95 percent of managers are dissatisfied with performance reviews, and nearly 90 percent of HR leaders say the process doesn't even yield accurate information, on the contrary, a company of 10,000 employees spends roughly \$35 million a year to conduct.

The following are some of the serious negative effects of the performance appraisal as listed in a paper by Roald J Baker, "Replacing the Annual Performance Appraisal Review" (2017)

- Performance Appraisal focuses on the weaknesses of the worker rather than his or her strengths; Learning is overshadowed by the evaluation and judgment inherent in the system
- Effective feedback should occur as needed, not on an arbitrary date on a calendar
- Performance appraisal are symbolic of a paternalistic boss-subordinate relationship based on command and control rather than the development of the knowledge worker
- It imposes a one-size-fits-all approach that hampers relevant, authentic feedback to different individuals
- Distortion surrounds the PA process, such as discipline or termination, pay raises, bonuses, promotions, and the like, lessening the focus on performance improvement
- Ranking people against each other does not help them do a better job, instead it creates "bottom performers," regardless of the absolute value of their work;
- PAs devote far too much attention to underperforming employees rather than top performers;
- PAs are extremely costly to administer and reap meager benefits;
- They do not provide any effective method for holding people accountable for future results
- It makes employees more vulnerable as any self-acknowledged weakness by a team member can be used against them

Author Daniel Pink in his article, "ThinkTank: Fix the workplace, not the workers", has summed up the negative effect of Performance reviews in the following words, "Performance reviews are rarely authentic conversations. More often, they are the West's form of kabuki theatre—highly stylized rituals in which people recite predictable lines in a formulaic way and hope the experience ends very quickly."

According to various sources, including the Society for Human Resource Management (SHRM), Forbes, Corporate Executive Board (CEB) – here is what's cited as not working or frustrating with the traditional performance appraisal:

- It's incredibly time consuming
- No correlation of individual ratings and actual business results
- Recent neuroscience research shows PAs put the employee on the defensive and monetary performance incentives reduce creativity

- Objective appraisals are really subjective – ratings are highly susceptible to unconscious bias.
- Manager and employee relationship is no longer one to one
- Managers cannot effectively judge an entire year of work for an individual at one time
- Companies with a lot of high performers, the forced rankings eliminate great talent (in a period of talent shortages) and damage the company culture (creating disengagement)
- People are motivated by positive, constructive feedback and are threatened and defensive by negative feedback
- While managers are sometimes trained on how to deliver feedback, employees are almost never trained on how to receive feedback – especially poor feedback

**Perceived effectiveness of performance management systems by organization size (on a scale of 1–4, where 4 is highly effective)**

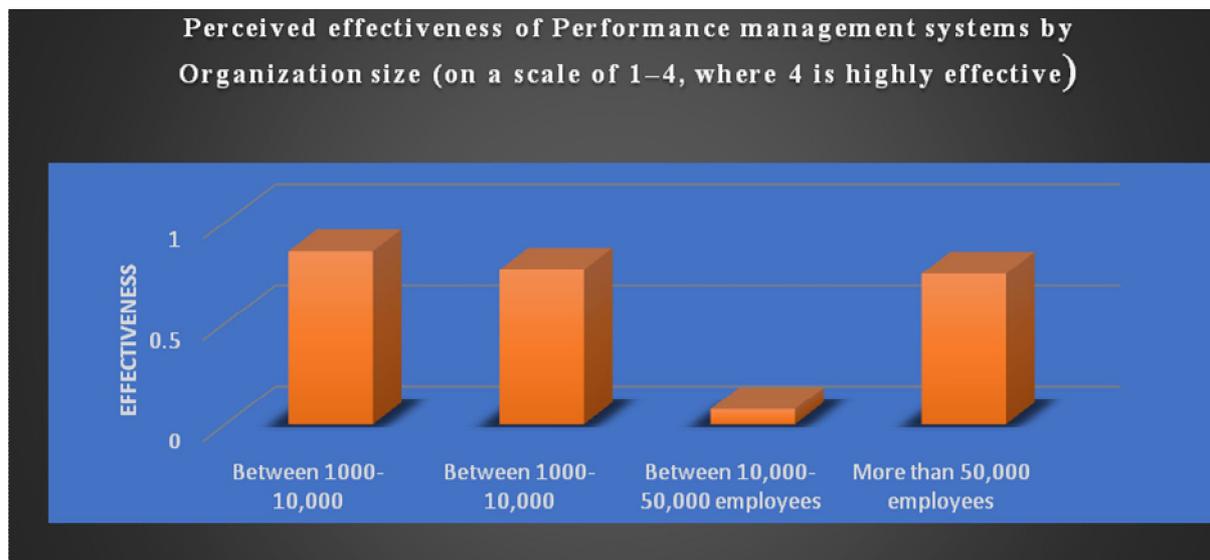


Figure 2

Source: A survey by PwC- Performance Management in India: A change beckons, 2016, www.pwc.in

The findings show that numerous companies have abandoned the annual performance review system which include: • Accenture • Adobe • Deloitte • Gap • Medtronic • Microsoft • Netflix • P&G

These companies account for 6% of Fortune 500 companies (source management research firm CEB), out of these the author has taken below listed organizations as case studies:

**DELOITTE**

**The Company**

The company with the largest professional services network in the world, and also known as the employer of choice for innovative human resource programs- Deloitte, has recently decided to revamp its performance review cycle. The company has initiated a process with a special focus on fuelling performance in the future rather than evaluating the past. The company was founded in UK and headquartered in New York, it currently boasts of 200,000 professionals in over 150 countries, providing audit, tax, consulting, enterprise risk and financial advisory services.

**Revisiting the old**

In the old system, the performance objectives would be set for each employee across the whole organization at the beginning of a year, then employees would be rated on how well they have met their objectives after the end of a project. Moreover, managers would also identify areas of improvement. These evaluations would form the basis for annual ratings, where counsellors would represent employees to discuss where each one stood compared to their co-workers. Earlier at Deloitte, objectives were set for each of 65,000-plus people at the beginning of the year; after a project is finished, each person’s manager rates him or her on how well those objectives were met. Feedback is sought on the areas where the person did or didn’t excel. These evaluations are combined into a single year-end rating, arrived at in lengthy “consensus meetings” where group of “counsellors” discuss hundreds of people in light of their peers.

Though the employee like the predictability of this process, and the fact that he or she has a representative at the consensus meetings, Deloitte realized that it is not the best design for company's emerging needs. The setting up of once-a-year goals are too "fake" for a real-time world, and conversations about year-end ratings are generally less valuable than conversations conducted about actual performance. The need for change crystallized, only when the company tallied the number of hours the organization was spending on performance management—and found that completing the forms, holding the meetings, and creating the ratings consumed close to 2 million hours a year. The company studied as how those hours were spent and realized that much of the time was eaten up by leaders' discussing behind closed doors about the outcomes of the process. Then, the company wondered if it could somehow shift the investment of time from talking about ratings to talking to our people about their performance and careers—to shift the focus from the past to focus on the future.

The survey revealed the following facts:

- 58% of managers thought the traditional performance review process did not serve a purpose
- approximately two million hours a year were spent on the whole review cycle - filling in forms, holding meetings and doing the actual rating
- Most of the time was spent discussing ratings, instead of actual conversations with the employee
- Brought into light, the theory of implied subjectivity of rating. The theory suggests that, if a manager is rating an employee on their ability to engage with another employee, that manager is giving a rating based on how important they think engagement is, which implies, when an individual is giving feedback to someone else, he or she, reveals more about himself/herself rather than about colleagues. This is called the 'idiosyncratic rater effect'.

### **The Way Forward**

Deloitte realized that the company is in need of real-time, and more individualized process that focused on fuelling performance in the future rather than assessing it in the past. For Deloitte, seeing performance means getting an accurate picture of someone's performance, thus eliminating "the idiosyncratic rater effect", and streamlining the review process beginning from evaluation to the final rating. The company was inclined to find the solution to the first problem- that is to redesign how the rater constructs feedback questions and to whom these questions were directed. Through numerous deliberations and practice sessions, it was decided that the best way to revamp the process is to provide feedback to the immediate team member by the team leader, in order to increase the efficiency of the system. Another important measure that the company has taken is to prompt immediate team leaders to evaluate their future intentions with team members not the employees' skills. The distinction lies in the fact that, with the new structure, team leaders rate themselves on their intentions and not just their skills. The company decided to have no cascading objectives, no once-a-year reviews, and no 360-degree-feedback tools, instead, it designed a very different and much simpler design for managing people's performance with speed, agility, one-size- fits- one and constant learning as its hallmark. And these characteristics are reinforced by a new way of collecting reliable performance data which makes more sense of Deloitte's talent dependent system. Replacing the Annual Performance Appraisal at Deloitte, meant developing three main objectives for Performance Reviews:

1. To recognize performance through variable compensation (annual comp decision)
2. To see performance clearly (the quarterly or per-project performance snapshot)
3. To fuel performance (weekly check-in with team leader).

Deloitte has constructed a unique way to keep a tab on employee performance by introducing Check-in conversations. These conversations are a key part of team leaders' work, conducted once every week to review latest projects, team leaders are instructed to set expectations for their employees and provide coaching for the upcoming week(s). These Check-in conversations are started by team members, to help team leaders, save more time and effort. Thus, with this on- going system of feedback, Deloitte has done away with the traditional system of performance review.

### **ACCENTURE**

#### **The Company**

Accenture, an organization which is known to clients for its high performance, focusing on reinventing performance review was essential. It was important for the company as this will truly enable business to get better. The largest consultancies in the world announced it was shedding annual performance reviews in favour of a system in which employees receive timely feedback from their managers immediately after the completion

of assignments. It was determined to join a small but prominent list of major corporations that have had enough with the forced rankings, the time-consuming paperwork and the frustration engendered among managers and employees alike

**Revisiting the Old**

The CEO, Pierre Nanterme, realized that spending time and resources on a system that did not yield desired outcomes, and was detrimental to his workforce. Bureaucracy and the complex nature of the performance review blocked employees from developing their own professional skills and talents. The company sees annual appraisals as an excessive use of time, money and effort, and made sincere efforts to move away from it.

**The way Forward**

- In September 2015, Accenture announced that it would be removing the annual performance review and replacing it with an ongoing review process and cited that they wish to evaluate employees based on their individual roles and performance. Thus, they designed an innovative method called the ‘Surround System Approach’, which propagates:
  - Business leaders to be immersed along with HR leaders in order to reinvent performance management.
  - Focus to be shifted to the people at the grassroots as they who were making this push forward.
  - Team leaders to be equipped with technology in a very human-centred design, tools and apps
  - Team leaders to understand the complete journey and how the future would look like.
  - To make communication more transparent and unique.

**Outcome of the Change**

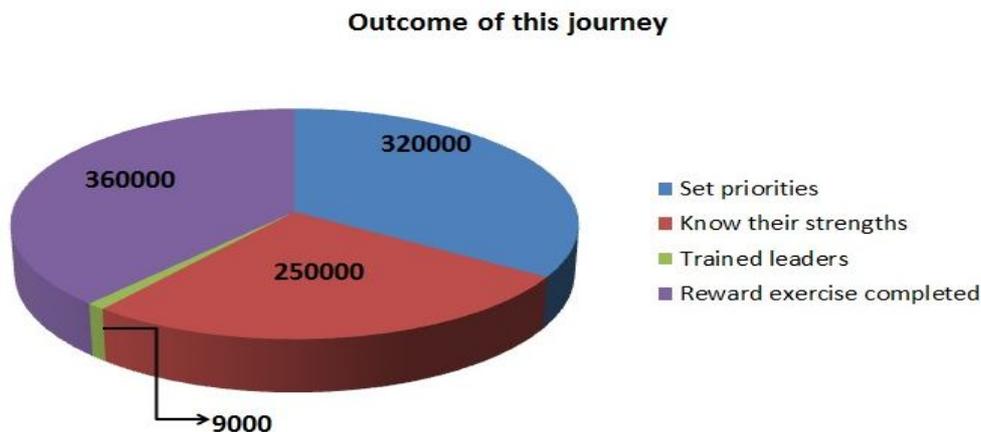


Figure 3 : Outcome of the change in Performance management in Adobe

**Replacing the Annual Performance Appraisal at Accenture, constituted of the following steps:**

1. 330,000 employees, eliminated Annual Performance Appraisals- September 1, 2015
2. Eliminated rankings
3. Eliminated once-a-year evaluations
4. Instituted more “fluid” system, feedback on an ongoing basis

The company hopes to get best values of the change with the times, and to hit a middle ground the company provides regular support to its employees and ensure that they perform better. It wants to do away with the process which evaluates the employees after they have contributed.

**GENERAL ELECTRIC**

**The Company**

General Electric is one of the few companies which is known for its legacy, not only in US but all over the world. The company was founded by the great inventor-Thomas Edison and is well into its second century of existence. In 2008, the company was given a designation, “too big to fail” when it sold its billion-dollar pieces of the lucrative financing business. The company’s restructuring to shift the focus on its increasingly high tech and industrial businesses, which includes power and water infrastructure, advanced jet turbines and imaging equipment.

**Revisiting the Old**

The company practiced a rigid system, championed by then-CEO Jack Welch, of ranking employees. Formally known as the "vitality curve" but popularly called "rank and yank," the system boiled the employees' performance down to a number on which they were judged and ranked against peers. It became a mandate to fire a bottom percentage (10% in GE's case) of underperformers. Stack ranking is a performance management system whereby employees are evaluated and ranked according to their yearly performance. This performance evaluation process was pioneered by the former CEO of GE, Jack Welch. This process would essentially boil employees down to a 'performance number'. Managers would set goals for employees to reach over a twelve-month period. Employees were then given feedback on an annual basis as to how well they were meeting these goals and a rating on a scale from one to five. The worst performers were then fired. At General Electric this number was typically 10% of the 'underperformers'. One of the biggest problems was that managers were required to give employees comments on ratings of 1 or 5. Eventually managers became indifferent in the way they would give feedback to their employees. GE developed a habit of giving most of their employees a 3, which indicated average performance, and gave no real insight into the health of the organization. Another problem with the stack ranking system was that it triggered similar effects to physical danger, which had negative effects on employee engagement and hampered productivity.

**The way Forward**

In August 2015, General Electric revamped its annual performance review by replacing forced ranking evaluations with on-going conversations. Further, an app was developed to assist employees' managers and teammates to share feedback. The formal review shall be replaced by something far less consequential and fraught. December would still be about annual summary conversations between employees and managers where they shall look back at the year and set goals. Though it's not meant to be all that different from the conversations expected to occur throughout the year, and it won't be completely unlike the sort of formal review that sets decisions on things like pay or advancement.

**ADOBE****The Company**

Founded in December 1982, Adobe Systems Incorporated, is an American multinational computer software company. Headquartered in San Jose, California, United States, though it had initially laid emphasis upon the creation of multimedia and creativity software products, Adobe is now shifting its interest towards rich Internet application software development. The company is best known for its products such as Photoshop which is an image editing software, Acrobat Reader-the Portable Document Format (PDF) and Adobe Creative Suite, as well as its successor Adobe Creative Cloud. As of 2015, Adobe Systems had about 15,000 employees worldwide. Though about 40% were employed in San Jose, major development operations also take place in Newton, Massachusetts; New York City, New York; Minneapolis, Minnesota; Lehi, Utah; Seattle, Washington; San Francisco, California in the United States.

**Revisiting the old**

Adobe followed a standard performance review system along with what is often called a "stack ranking" system. Once a year, managers would assign employees to four categories: high performer, strong performer, solid performer or low performer. Managers would collect examples of past performance, conduct 360-degree evaluations for each employee, and draw up a report on each employee's performance for the year. This system had the following flaws:

- There was a limit to the maximum number of employees that could be assigned a particular category. "Strong performer," for example, could be assigned to no more than 20% of a manager's team.
- It was an expensive process.
- There was a wastage of effort. According to a study, 80,000 hours of Adobe's managers' time was required each year to conduct all the reviews, the equivalent of nearly forty full-time employees working year-round.
- It has been observed that there was a pike in the voluntary attrition just after the months following annual review- an indicator that the employees were not satisfied with the ratings.

**The way Forward**

In the year 2012, Adobe brought about a less formal "check-in" process to eliminate the yearly performance review. It totally revamped its performance management system. Now, every four months, managers and employees meet for check-in discussions. Though the discussion isn't scripted, every check-in discussion covers three topics: expectations, feedback, and growth and development. Employees analyse their current role and

their desired career path. Managers then advise them on the knowledge, skills, and abilities they need to improve in their current role to move more rapidly to the future they envisage for themselves. Discussing employees' growth and development allows both groups to brainstorm on staff goals and how they align with Adobe's strategy rather than having a rearview-mirror perspective provided by most annual reviews. This part of the check-in helps employees steer their own career and development plan and empowering them to grow. To spread about awareness among employees and managers, Adobe hosted sessions. Training sessions were conducted exclusively for managers to teach them how best to structure their check-in sessions. There was a positive response as about 90% of Adobe's managers participated in the training. An employee resource centre was set up to answer frequently asked questions about performance management, career coaching, and making the most of check-ins. Three years into its invention, Adobe's new system has been running exceptionally well. At Adobe, engagement surveys have proven that employees have a much more positive outlook on performance reviews and report, receiving better and actionable feedback, after the death of the old annual review. This transformation brought about an evident enhancement in the overall organisational efficacy which is echoed in the following figures:

- Feedback is now viewed as a gift. Self-esteem among employees and managers has amplified, largely owing to the regular feedback every few weeks.
- The improvement in morale has led to improvement in hard numbers as well. The company has seen a considerable dip in the employees voluntarily quits (about 30%) and a substantial increase (about 50%) in involuntary departures. The employees who do not meet expectations are dealt directly and quickly rather than waiting for a year.
- The 80,000 hours spent by managers annually on annual reviews before is now spent elsewhere in developing Adobe as a better company.
- Adobe's outcomes propose that other corporations could benefit too by giving the performance management system itself an exhaustive performance evaluation. Retain the parts that employees and managers rate as beneficial, and as for the parts of the process that aren't making the mark, it may be time to show them the door.

## **CONCLUSION**

The goal of performance management is to enhance the performance of the individual and the organization by evaluating and rewarding performance in an equitable and reliable manner. Today the organizations are facing some challenges to implement a system that meets the diverse and often peripheral needs of the various stakeholders of the process. It is high time that the organizations should realize that there is no one-size-fits-all approach to managing performance and having a 'right' approach in place depends considerably on them. Organizations are acknowledging the fact that a traditional performance system of rank and file should be replaced by a more continuous and agile performance review system. The need of the hour is that organizations should closely examine their performance processes and push toward simplification and strengths-based assessment and coaching. Gone are the days of traditional appraisals and forced ranking. Performance management has now become a tool for greater employee engagement - a robust tool in the hands of the organization which provides an analytical goal-setting if used diligently. With the advancement in the technology, more and more organisations are drifting away from the traditional system and incorporating the use of apps and Artificial intelligence to seek regular feedbacks. It is imperative for the organisations to design an evaluation system which factors and records an 'employee's journey' through the course of his or her tenure rather than just acting as a marker of his or her 'annual destinations'. The organisations should realize that, at the end of the day, employees are critical stakeholders and they should thrive to have a longer-term association with them. Thus, it becomes imperative, that companies changed their focus to implement those performance management models that are better geared towards meeting the needs of employees, it should provide an impetus for growth of the employees rather than just measuring their performance.

## **RECOMMENDATIONS**

The authors propose a three-fold model-3 Rs of Performance Review- Relate, Revamp and Recognize (recognize, reward & retain) to improve the performance review system

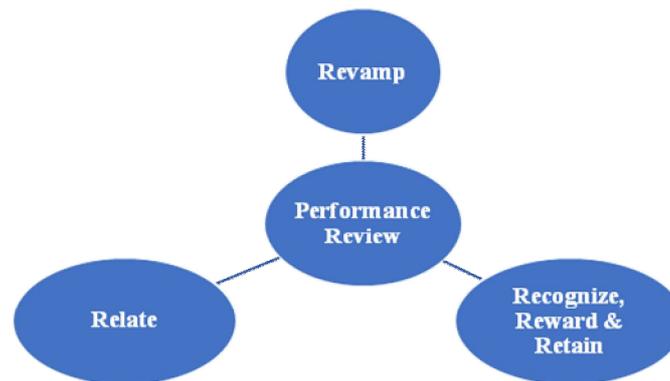


Figure 3: Three- Fold Model for Performance Review System

### Relate

- i. **Redesign Jobs:** Alignment of Individual and Organisational aspirations and designing key responsibility areas that are better linked to job description and organizational goals, individual objectives and most importantly are measurable.
- ii. **Continuous Feedback:** Provide feedback on things the employee can change. It is to be kept in mind that the rater should avoid talking about personality traits or characteristics that employees can't change. The negative feedback should be supported by specific incidents and examples. It has to be communicated that the focus should be more on strengths than weaknesses. It has to be ensured that the performance management system focusses on developing individuals and not just measuring performance. Performance Reviews need to be more holistic and should consider non-obvious team-building behaviours, i.e., give equal importance to the intangible behaviours.

### Revamp

- i. **Eliminate Ratings and scales:** It is imperative for the companies to remove all check boxes and numeric scales. The companies should understand that performance is more complex than merely checking the boxes. "A good performance review system highlights significant incidents, provide clear examples of positive and negative behaviours, and include specifics. Employees get demotivated by the inaccuracy of performance ratings. Findings by the research organisation Corporate Executive Board, (CEB), presented that the employees who received the best scores in a performance review were not actually the organization's highest performers. Moreover, it turns out the companies with the most employees rated "above average" are likely to be below average companies, with low rating in metrics like profitability and customer satisfaction. Thus, it is unreasonable to believe performance ratings will incentivize employees to perform better, likewise, it may not be necessary that performing better will result in better performance ratings.
- ii. **Leveraging Technology:** Another ground-breaking development that has been made possible with the advancement in technology is the use of Artificial Intelligence in performance review. Artificial Intelligence driven assessment can happen in real-time (with systems monitoring targets, quotas and measuring how it is affected by people's connections), incentives and praise for good performance can be handed out immediately, and in case of discrepancy, changes can take place before the problem grows and becomes unmanageable.

### Recognize, Reward & Retain

- i. **Recognize and reward star performers:** To improve the performance of the organization, conventional thinking may be incorrect, thus it is important to understand who is driving the performance. The classic performance rating scale is based on a normal distribution, graphically displayed as a bell curve. This distribution determines an average performance and classifies one half of employees as above average and the other half as below average. But in this system, the existence of star performers is unaccounted for. Thus, the bell curve reveals many implications for a performance management system. On the other hand, a Paretian distribution, also known as a power law distribution, recognizes greater extreme values. It identifies Star performers, by output, as opposed to ability or motivation. The business should nevertheless implement a consistent method to detect star performers, as it is a fact that a small number of star performers create most of the value for the business.
- ii. **Retain:** After recognizing the star performers, all efforts should be made to retain them designing strategies which may include compensation packages reflecting their role as a star performer, individual work arrangements and other work-life balance policies. The existence of star employees can allow companies to

put an outsized focus on employees that have an outsized impact. As such most of the tools used to engage, reward and retain star employees are the same as those a company would use with all employees, but, when resources are scarce, the star employees should receive special attention proportionate to their contributions. Creating a culture of continuous feedback requires organization should seek to maximize the performance of all employees.

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**E-GOVERNMENT & E- GOVERNANCE: IMPACT, ISSUES AND CHALLENGES IN THE DEVELOPMENT OF RURAL AREAS**

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**ABSTRACT**

*E-Government is an institutional approach to jurisdictional political operations whether E-governance is a procedural approach to co-operative administrative relations, i.e. the encompassing of basic and standard procedures within the confines of public administrations. It is the latter that acts as the lynchpin that will ensure success of the delivery of e-services. E letter here in both e-government and e-governance stands for the electronic platform or infrastructure that enables and supports the networking of public policy development and deployment. I would like to find out through my research paper that what is the impact and role of E-government and E-governance in the development of rural areas and what are the issues and challenges in the path of e governance and e-government in the development of rural areas.*

*Keywords: E-Government, E-Governance, Rural Development, Impact*

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**INTRODUCTION**

E-government is a generic term for web-based services from agencies of local, state and federal governments. In e-government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services. The interaction may be in the form of obtaining information, filings, or making payments and a host of other activities via the World Wide Web (Sharma & Gupta, 2003, Sharma, 2004, Sharma 2006). E-government is defined by other sources as follows: World Bank ([www.worldbank.org](http://www.worldbank.org)) definition (AOEMA report): "E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions." United Nations ([www.unpan.org](http://www.unpan.org)) definition (AOEMA report): "E-government is defined as utilizing the Internet and the world-wide-web for delivering government information and services to citizens."

E-governance, meaning 'electronic governance' is using information and communication technologies (ICTs) at various levels of the government and the public sector and beyond, for the purpose of enhancing governance (Bedi, Singh and Srivastava, 2001; Holmes, 2001; Okot-Uma, 2000). According to Keohane and Nye (2000), "Governance implies the processes and institutions, both formal and informal, that guide and restrain the collective activities of a group. Government is the subset that acts with authority and creates formal obligations. Governance need not necessarily be conducted exclusively by governments. Private firms, associations of firms, nongovernmental organizations (NGOs), and associations of NGOs all engage in it, often in association with governmental bodies, to create governance; sometimes without governmental authority." Clearly, this definition suggests that e-governance need not be limited to the public sector. It implies managing and administering policies and procedures in the private sector as well. 2 S.C.J. Palvia and Sushil S. Sharma / E-Government and E-Governance: Definitions/Domain ... The UNESCO definition ([www.unesco.org](http://www.unesco.org)) is: "E-governance is the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective. E-governance involves new styles of leadership, new ways of debating and deciding policy and investment, new ways of accessing education, new ways of listening to citizens and new ways of organizing and delivering information and services. E-governance is generally considered as a wider concept than e-government, since it can bring about a change in the way citizens relate to governments and to each other. E-governance can bring forth new concepts of citizenship, both in terms of citizen needs and responsibilities. Its objective is to engage, enable and empower the citizen." "E-democracy builds on e-governance and focuses on the actions and innovations enabled by ICTs combined with higher levels of democratic motivation and intent" (Clift, 2003). The concept of electronic governance chosen by the Council of Europe covers the use of electronic technologies in three areas of public action; relations between the public authorities and civil society; functioning of the public authorities at all stages of the democratic process (electronic democracy); the provision of public services (electronic public services) (Council of Europe,

<http://www.coe.int/T/E/Com/Files/Themes/e-voting/definition.asp>). E-governance is defined as the, “application of electronic means in (1) the interaction between government and citizens and government and businesses, as well as (2) in internal government operations to simplify and improve democratic, government and business aspects of Governance.” (Backus, 2001). According to Kettl (2002), "Governance" is a way of describing the links between government and its broader environment - political, social, and administrative." The application of electronic links means the interaction between government and citizens and government and businesses, as well as in internal government operations to simplify and improve democratic, government and business aspects of Governance (Kettl, 2002).

### **DIFFERENCE BETWEEN E-GOVERNANCE AND E-GOVERNMENT**

According to some authors e-government constitutes only a subset (though a major one) of e-governance. According to these author e-governance is a broader concept and includes the use of ICT by government and civil society to promote greater participation of citizens in the governance of political institutions, e.g., use of the Internet by politicians and political parties to elicit views from their constituencies in an efficient manner, or the publicizing of views by civil society organizations which are in conflict with the ruling powers (Howard, 2001 and Bannister and Walsh, 2002). It is clear that considerable confusion exists in explaining e-government and e-governance. In what follows, we attempt to resolve the ambiguities and come up with clear and non-overlapping definitions. Our premise is simple: e-government's focus is on constituencies and stakeholders outside the organization, whether it is the government or public sector at the city, country, state, national, or international levels. On the other hand, e-governance focuses on administration and management within an organization, whether it is public or private, large or small.

### **2. LITERATURE REVIEW**

Impact of E-governance to control the corruption based on analysis of various projects implemented in India (Singla and Aggarwal, 2011). India is faced with a large number of challenges that is typical for developing countries (Madan, 2004). There is vital need to recognize the role of local knowledge in sustainable development (Garai and Shadrach, 2006). The challenges arise from change in government policy with change in government, lack of sufficient skilled welltrained human resource, supply of sufficient fund for implementing such capital intensive project (Hassan, 2013). Governments and public sector organizations around the world are facing to reform their public administration organizations and deliver more efficient and cost effective services, as well as better information and knowledge to their stakeholders. (Dwivedi and Bharti, 2010). There is another problem that is of language. As the information is not supplied in the local language, so the people do not feel comfortable (Monga,2008).

### **OBJECTIVES OF THE STUDY**

1. To find out the E- governance and E-government impact in the development of rural areas and the issues and challenges faced by the E-governance and E-government in the rural areas.

### **RESEARCH METHODOLOGY**

To find out the objectives of this study mostly I used the secondary sources of data from the books, Journals and some government websites etc.

### **IMPACT AND ROLE OF NEGP AND NIC IN E- GOVERNANCE**

For the success of e-governance, Government launched National e-governance plan and with the help of National Informatics Centre set up a central repository for all e-governance initiatives.

#### **NeGP**

National e-Governance Plan was launched with the following vision: “Make all Public Services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man.”

NeGP came up on May 18, 2006 by Department of Electronics and Information Technology (DEIT) and Department of Administrative Reforms and Public Grievances (DAR&PG). NeGP was set up with 27 Mission Mode Projects (MMPs) and 8 components. It was specially designed for rural areas and for the easy access of the services provided by NeGP State Wide Area Network (SWAN) and Common Service Centre (CSC) was set up.

#### **NIC**

NIC is a part of the Indian Ministry of Communications and Information Technology's Department of Electronics & Information Technology and came up in 1976. It is a website designed for all the e-governance

initiatives taken by government at one place. This includes blocks, districts, state government and central government. The ICT network of NIC is called NICNET.

### **E-GOVERNANCE PROJECTS UNDER TAKEN BY GOVERNMENT FOR RURAL INDIA**

Government has undertaken many projects for the benefit of rural India. Many of these projects have been successful. Still more initiatives can be taken and the one which are currently working can be improved further keeping in mind the problems being face by the people in accessing these projects. Some of these projects are discussed below:

#### **Gyandoot**

Gyandoot is a government to citizen intranet based project launched in Thar district of Madhya Pradesh on 1st January 2000. It made use of IT for benefit of rural areas where people do not have the facilities as those in cities. For this 21 soochnalayas were set up which had computers. Each of these soochnalayas/kiosks catered to about 20,000- 30,000 villagers. For running these soochnalayas, a local youth from the village was selected as soochaks. The soochak was not given any salary. In fact they operated the kiosks and charged for the services they provided. They charged Rs.5/- for providing information about the agricultural produce. A fee of Rs. 15/- per extract is charged for providing documents related to farmer's land which is considered valid by banks. Rs. 10/- is charged for submitting applications for obtaining certificates as and when required by the villagers. A charge of Rs. 10/- is taken for lodging any complaint like mid day meal etc. Auction facility is also provided. For a charge of Rs. 25/- for 3 months anyone can put the commodity on sale. Further, Rs. 10/- is charged for viewing all the salable commodity. Of the total earning the soochak pays 10% of income as commission to the zilapanchayat. So, the scheme is self-sustainable

#### **Bhoomi**

"Land record forms the base for all land reforms and therefore regular online updating of land records is essential. BHOOMI has done it." Bhoomi is an initiative of Karnataka government to computerize land records. Records of 6.7 million farmers dealing with 20 million records in Karnataka state have been computerized. Revenue department of the Government of Karnataka along with NIC implemented this computerization of land records. A farmer requires his official land records for many purposes like for getting loan on crop from any financial institution or any legal dispute, etc. Problems with the earlier manual systems like the registers of land record not properly maintained, or not very legible lead to its computerization. Any farmer can now readily get their land record from land record kiosks available. Also, farmers get an acknowledgement number if they submit a request for mutation on land records. So, now farmers can track the process of mutation on the touch screen kiosk available and in case of any delay can report to higher officials also. Thus, this leads to transparency. Seeing the success of Bhoomi other states like Andhra Pradesh, Haryana, Madhya Pradesh has also implemented a similar system.

#### **E-choupal**

E-choupal is an initiative of ITC Ltd. This project is a success and has benefited the farmers a lot. In this a trained villager called Sanchalak was appointed to run the ITC internet kiosk. E-choupal contains information about the latest farming techniques, weather forecasts, crop insurance, etc. through which the farmers remain well informed. This initiative of ITC removed the intermediaries who used to take away a larger portion of profit from the farmers. The farmers could now directly negotiate the prices with ITC NidhiSrivastava / (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (1) , 2015, 741-744 www.ijcsit.com 742 limited for their produce and earn a good profit. Further the daily mandi price of the various commodities is also available online. The productivity of the crops increased as now the farmers could purchase good seeds and fertilizers, which in turn yielded profit to the farmers. ITC's e-choupals serve 40,000 villages and 4 million farmers, making it the world's largest rural digital infrastructure created by a private enterprise.

#### **E-post**

"Send mail from anywhere in the globe". Internet and email are a main part of e-governance. E-post service was launched by the secretary of the Department of Posts on 30th January 2004. But in rural areas these facilities are not available. Keeping this in mind, the Department of posts introduced the facility of e-post. It is a very simple service where people can send the messages anywhere in India. In this a person who has to send the message simply approaches the post office, where the person scans the handwritten or printed document and sends it via email to the nearest destination post office. There the printout of the document is taken out, sealed in an envelope and delivered at the destination address. The document can be in any language. A fee of Rs. 10/- per A4 page is charged. For encouragement to the corporate customers post office gives them special e-post rates

and other value additions. For Corporate customer e-post costs Rs. 6 per page of A4 size & for bulk it costs Rs. 5/- per page. This service tries to bridge the digital divide.

### **E-panchayats**

Panchayats are a local village based self- government. As majority of the population of India lives in villages the panchayats play a major role. Government thus felt the need to improve it and transform it, and so e-panchayat was introduced. In fact e-panchayat was identified as the Mission Mode Project (MMP). In this 2,50,000 panchayati raj institutions at the gram panchayat, block and zilaparishads were identified which were to be joined with ICT . NIC developed e-panchayat for Hyderabad, Andhra Pradesh. All the information of the gram panchayats was collected and based on that the e-panchayat was initiated. The e-panchayat comprised of 30 modules with about 150 sub-modules. These modules were based on providing the information to the villagers on various products like agriculture, irrigation, fisheries etc. and also on other problems relating to loans from industries, housing, water etc. It also dealt with various other services like property tax, registration and issuance of death and birth certificates, disbursement of old age / widow and disabled pensions, building approvals for residential purpose etc. An important module in this was the grievance redressal where any grievance could be registered and also later on monitored for solution. Thus the project caters to all aspects of panchayat's functioning including planning, monitoring, implementation, budgeting, accounting, social audit and delivery of citizen services.

### **CHALLENGES IN E-GOVERNANCE AND E-GOVERNMENT**

E-governance was introduced for the better communication between citizens and government. But the government faced lots of problems in introducing it. Few of the problems or challenges faced by government are listed below

**1. Illiteracy** - The government is making effort in increasing the literacy rate in rural population but still much needs to be done as it is far less than the literacy rate in urban population. Literacy rate in rural areas stand at 67.67% with rural male literacy rate 77.15% and rural female literacy rate 57.93%. Whereas literacy rate in urban areas stand at 84.11% with urban male literacy rate at 88.76% and urban female literacy at 79.11%.

**2. IT Illiteracy** - This is a major drawback in which the users are not technically literate to use the technology. Especially in India, where many of the schemes launched by the government like AGMARKNET, Bhoomi etc. have rural people as end users and because of lack of technical knowledge they are incapable of using the facilities provided by the government.

**3. Varied Languages** - In India we have people speaking different languages and the rural population does not know any other language than their native language. All the e-governance projects generally use English as the base language which majority of the population do not understand and thus they are unable to use these projects.

**4. Lacks Awareness** - People are unaware about the facilities provided by the government for their use. Although, Government has made initiative in certain cases by broadcasting about their projects on radio, TV and putting banners etc. for awareness among the people.

**5. Hesitation to change** - People are reluctant to change. As e-governance means change of the system from manual to computerize based, it is NidhiSrivastava / (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (1) , 2015, 741-744 www.ijcsit.com 741 generally disapproved by the employees and the general public. People generally dislike it as they need to learn new things in it for which they need to give in more time and effort.

**6. Infrastructure & Running Cost** - It is difficult to connect all rural areas through internet and at times it is difficult to lay wires at these places. In remote areas generally till now there is no basic infrastructure available like connectivity and electricity.

### **SUGGESTIONS FOR IMPROVING E-GOVERNANCE**

**1. The Literacy rate needs to be increased** – Literacy is considered an important factor in economic development. Government initiated many programs for increasing the literacy rate. In fact Government has set up many primary schools in various areas. But this has not been successful as most of the schools are not functioning properly and students studying in these schools are still unable to read or write. So, more emphasis is to be given on the improvement of these schools. Reasons cited for so is lack of proper infrastructure and basic needs in schools like no drinking water, lack of proper toilet facility, teachers absent from school etc. which discourage students from attending school .

**2. ICT Development** – Twelfth five year plan has proposed “Removing barriers of cost, language and accessibility and provide equitable access to Internet and its benefits to all. Formulate and implement a national digitization plan and a digital information literacy campaign for enabling the common man to use ICT optimally.” This move of Government will also help in reducing the digital divide. According to RRN Prasad, a member of the Telecom Regulatory Authority of India (TRAI): “In the Indian context, bridging the digital divide essentially means bridging the teledensity divide between rural and urban areas.”

**3. Cloud Computing** - Today, cloud computing plays an important role in IT field. Cloud computing is beneficial for all those areas where technological infrastructure is not proper. Cloud computing can also help in internet proliferation. According to Vikram Kumar Mallavarapu, Vice President – Sales, Public Sector, CiscoIndia& SAARC: “Cloud computing can contribute in a variety of ways to deliver citizen services efficiently and enable IT resources to be provided on demand, at scale in a multi-tenant, yet secured environment.”

**4. More projects like Speech-Based Automated Commodity Prices Helpline** for needs to be developed - All the e-governance projects initially initiated used English as the medium of communication. But in rural areas where the people are not at all educated and cannot read and write their native language dealing in English is definitely a problem. This is also a cause of failure of many e-governance projects. A very good initiative has been taken by consortium of seven institutions (IIT-M, IIT-K, IIT-B, IIT-G, IIIT-Hyd, TIFR& CDAC-Kol) and coordinated by IIT Madras. A speech based automated commodity prices helpline for AGMARKNET has been introduced in six different Indian languages. In this they have developed an automated system from which the farmers can inquire about the latest price of agricultural commodities in their own native NidhiSrivastava / (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (1) , 2015, 741-744 www.ijcsit.com 743 language. Thus the farmers are benefitted from this initiative. More such types of initiatives should be started by the Government so that more and more rural population can interactively interact with the e-governance projects.

**5. Business Process Re-engineering** – Although e-governance emphasizes on ICT, it is not the only factor in its success. For good e-governance reengineering is essential. The processes, procedures need to be restructured so that there is a great leap in the performance of the e-governance. For this Strategy, Processes, Technology, Organization and Culture the five components of the business need to be changed.

**6. Setting up of more CSCs** – For the benefit of villagers more CSCs should be set up, so that they have easy access to the facilities provided. Nearer the CSC more a person will use it. VI.CONCLUSIONS E-governance is a key to success for good governance. It gives the facility to the citizens to benefit from the services provided by the Government. There has been a considerable increase in the percentage of individuals using the Internet in India. The Internet usage has increased from 0.53% in 2000 to 15.10% in 2013. Although the Government faced a lot of challenges but still the move towards e-governance in India has been successful. In this paper we dealt with the challenges faced by the Government in implementing e-governance in rural India. Also a description of some of the projects has been given which has been introduced by the Government for the benefit of citizens. Further, the paper lists down the solutions for a more effective and efficient e-governance program.

## CONCLUSION

Governments should focus on improving services of e-governance based on citizen centric factors (infrastructure, poverty, lack of funding, literacy rate and local language problem) for sustainable development. They should be aware of what are the major expectations of the citizens (corruption free services, trustworthily services freebies or nominal fee).In the rural areas people are innocent and economically their condition is not much better so it should be the responsibility of the govt. to provide them each and every kind of necessary thing in the minimum cost so that they can also get the fruits of e-government and e-governance in every nook and corner of rural India.

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NOISE MODELS IN DIGITAL IMAGE PROCESSING

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**ABSTRACT**

Image processing has a great importance in every field (Medical, Education, Astronomy and Defense) now a days. Images get corrupted due to noise present in them. To identify this noise, in this paper, methods and various techniques are described. Noise removal is the important in order to retain the quality of the image. During image acquisition and transmission noise is added to images. Noise cannot be identified through naked eyes. So it is necessary to identify noise using some models. In this paper, types of noise model is discussed.

Keywords: Image Denoising, Types of Noise, Digital Image, Features, Denoising

**I. INTRODUCTION**

Digital images are used in every field in this world of technology but these images get corrupted due to presence of noise. Noise can be any unwanted extra information present in image. De-Noiseing is used to remove this unwanted information from images. It is also called as noise reduction. Generally noise in images is introduced during acquisition, transmission and compression. Different types of noises are present in images some commonly known noises are Gaussian noise, Poisson noise, Speckle noise, Salt and Pepper noise. There are various reasons for introduction of noise in images. The various sources of noise in digital images are environmental conditions that may affect the imaging sensor, Low light and sensor temperature may also responsible for introduction of noise in the image. Dust particles present in the scanner may also introduce noise in the digital image. Interference in transmission channel also I responsible for introduction of noise in digital images[1,2].



Figure -1: Illustration of noise in the image

**2. NOISE MODELS**

Noise present in images tells about how much unwanted information is present. Due to presence of noise unwanted and undesirable effects like artifacts, unseen lines, background scenes, blurred objects and unrealistic edges and corners are produced. To reduce all these undesirable results understanding of noise models is very important for processing of digital images. Here we will discuss some noise models

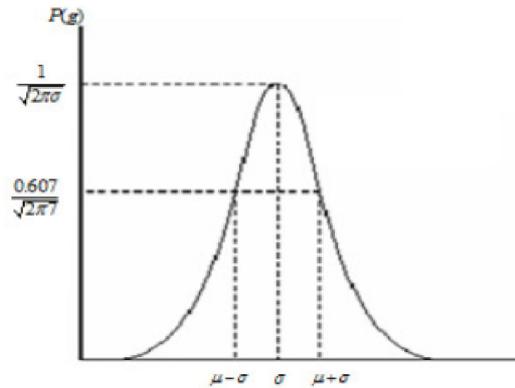
**1. Gaussian Noise Model**

Noise produced in amplifiers and detectors is known as Gaussian Noise and is also known as Electronic noise. Gaussian Noise is generally caused by thermal vibration of atoms and due to discrete nature of radiation of warm objects.

Due to Gaussian noise Grey values of digital images are disturbed and that is reason for Gaussian noise model essentially designed and characteristics by its PDF or normalizes histogram with respect to grey value.

$$P(g) = \frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{(g - \mu)^2}{2\sigma^2}}$$

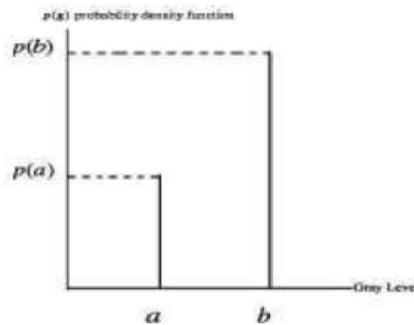
Where  $g$  = gray value,  $\sigma$  = standard deviation and  $\mu$  = mean. Gaussian Noise model is a mathematical model that represents generally real world scenarios. In Gaussian noise model, the mean value is zero, variance is 0.1 and 256 gray levels in terms of its PDF. Curves are bell shaped due to equal randomness and normalized Gaussian Noise. Fig 2 below represents Gaussian Model



**2. Salt and Pepper Noise Model**

This model is also known as data drop noise because statistically it drop the original data values. This noise present is also called as salt and pepper noise. Due to salt and pepper whole image is not fully corrupted instead some pixel values are changed. It is not necessary that neighbors will also change in noisy image although possibilities of some neighbors does change[3].

$$p(z) = \begin{cases} P_a & \text{for } z = a \\ P_b & \text{for } z = b \\ 0 & \text{otherwise} \end{cases}$$



**3. Impulse noise**

Noise that is very much responsible for corrupting digital images is Impulse noise. Due to non-idealistic approaches in image processing noise usually corrupts images by replacing some pixels of the original image with new pixels having luminance values near or equal to maximum or minimum dynamic allowable range of luminance. Impulse noise is usually caused by malfunctioning original pixels in camera sensors, faulty locations in memory hardware or due to noise in transmission channel. Generally we have two types of Impulse noises: Fixed-valued impulse noise and random-valued impulse noise. Impulsive noise can be assumed as an additive noise[4], this noise damages pixels randomly and at random positions[5]. Pixels corrupted due to Impulse noise have either extremely high or extremely low intensity values[6,7].

Noisy image can be modelled as follows:

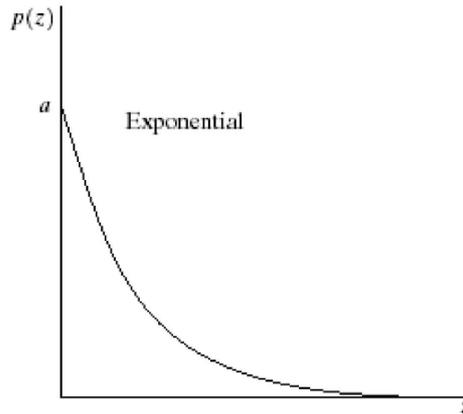
$$g(x, y) = f(x, y) + \eta(x, y)$$

Where  $f(x, y)$  is the original image pixel,  $\eta(x, y)$  is the noise term and  $g(x, y)$  is the resulting noisy pixel.

**4. Exponential Noise**

$$p(x) = \begin{cases} \frac{1}{\sigma} e^{-x/\sigma} & x \geq 0 \\ 0 & x < 0 \end{cases}$$

The mean and variance of this density are given by  $\mu = \frac{1}{\sigma}$  and  $\sigma^2 = \frac{1}{\sigma^2}$



**5. Uniform Noise**

By quantizing pixels of image noise is generated known as uniform noise and is usually by number of distinct levels. Gray values of the noise are uniformly distributed across specified range in uniform noise. Different type of noise distribution can be generated using Uniform noise. Images can be degraded using Uniform noise for the evaluation of image restoration algorithms.

$$p(z) = \begin{cases} \frac{1}{b-a} & a \leq z \leq b \\ 0 & \text{otherwise} \end{cases}$$

The mean and variance of this density are given by  $\mu = \frac{a+b}{2}$  and  $\sigma^2 = \frac{(b-a)^2}{12}$

**7. CONCLUSIONS**

Image acquisition and transmission are two main sources of noise. All noise seen in images is characterized by noise model. So studying noise model is very important and necessary in image processing. In order to remove noise from images we have to understand different noises present and we cannot elaborate and perform denoising without having knowledge of noise model.

Hence we have reviewed and presented different noise models available. We addressed that origin of noise can be used to identify model. We hope this review work will provide a susceptible material and comprehensive knowledge for researchers as well as freshers in the field of image processing that has a great importance in every field of life.

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**EFFECTIVENESS OF PROBLEM BASED LEARNING IN TEACHING-LEARNING PROCESS**

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**ABSTRACT**

*Being a teacher in today's world requires a vast and extensive toolbox of disciplines; from pseudo-parents fostering societal values to psychologists who understand the individual needs of the student. To reach all of our students we should be equipped with the ability to modify our teaching methods to match their learning abilities. Teaching methods change, are disputed, and new methods are suggested as the pendulum swings between operant conditioning and constructivist theories of education. The Problem-Based Learning (PBL) method is of special interest to us as it is one of the "popular" method for teaching.*

*The purpose of the paper is to take an impartial and critical look at PBL and the data collection needed to reflect this with impartiality.*

*It was easy to find data using keywords such as "problems with PBL" or "Is PBL effective in today's classroom" which would create a biased literature base. Moreover, the definition of PBL in itself is biased as Barrows' own research led to his creation and dogmatic implementation requirements of Problem-Based learning. Therefore, the base of the paper is his definition of PBL and his implementation requirements of the method.*

*The limited quantitative research shows that there are advantages to using the PBL method, which is based on the inductive and constructivist learning theory.*

*The results demonstrated from the students' perspective, an inductive approach was more interesting and allows them to think more freely and contributed to their problem solving skills. The students further stated peer interaction and independent thinking as positive aspects of the approach.*

*The problem arises as teachers do not have the same ability to interpret the curriculum and present it clearly and the differences between student groups can lead to differences in learning.*

*PBL has faced both praise and criticism, and one of the strongest proposed criticisms is that PBL is not suitable for everyone.*

*This study has focused on the inductive PBL approach as well as its effectiveness. Since we belong to a knowledge-based or rote memory school system, the effectiveness of PBL does not coincide with summative assessment. As PBL is a life-long learning skill, summative testing cannot assess the effectiveness of PBL in any quantifiable way.*

*Keywords: PBL, knowledge-based or rote memory, pseudo-parents*

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**1. INTRODUCTION**

It cannot be denied that being a teacher today requires a vast and extensive toolbox of disciplines; from pseudo-parents fostering societal values, to psychologists who understand the individual needs of the student. To reach all of our students we need to be equipped with the ability to modify our teaching methods to match their learning abilities. Teaching methods change, are disputed, and new methods are suggested as the pendulum swings between operant conditioning and constructivist theories of education. The Problem-Based Learning (PBL) method is of special interest to us as it seems to be a "popular" method for teaching. Through exposure to varying degrees of PBL in our practical training to hearing high praise for the method from more experienced teachers, we thought a closer, more critical look at it was necessary. We cannot, in clear conscience, just accept new methods as "the best" without closer examination; our standing as professionals counts on this. As mentioned above, the popularity of methods changes as new research is conducted. As future teachers we owe it to our future students to be not only proficient in our chosen subjects, but also proficient in our pedagogical methods.

The constructivist method of PBL is the focus of this paper as PBL has been promoted by many as the best method to foster learning through discovery. We will use the most current research possible in the field of pedagogy and, although heavily biased towards medical schools, discover what current research says about the effectiveness of PBL.

We will take a closer look at both the positive and negative aspects of PBL and the success and failure rates of PBL as an inductive method. We will take into consideration such factors as; frequency, whole school vs. one class, role of the teacher, assessment, and group size influence the effectiveness of PBL.

### 1.1 Objective

The main focus of this paper is to take an impartial look at PBL as a teaching method and the empirical evidence which backs up its effectiveness. Quite simply, does the evidence provided in PBL research support the supposed effectiveness of the method?

### 1.2 Question

With the above-mentioned objective in mind, we formulated two research questions which we considered paramount in the field of PBL.

- What is the empirical evidence regarding the advantages and disadvantages of PBL in the classroom?

### 1.3 Definitions or What is PBL?

PBL is defined by Howard Barrows, American physician and medical educator, (1996) as a learning method which involves student centered learning in small groups lead by a tutor or “expert”, rather than teaching using traditional lecture teaching. The role of the tutor is to guide the students toward discovering answers on their own rather than to simply provide the correct answer. Through the guiding process the tutor will stimulate the students’ cognitive learning process and problem-solving skills with self-directed learning (SDL), also known as auto didacticism. Auto didacticism, which is commonplace in higher learning, is the idea that the teacher does not need to schedule learners’ private time. Students are expected to be able to organize their lives, studies and learning in a manner which prepares them for their chosen profession (Armstrong, 2012).

However, the tutor needs to lay out the curriculum/plan according to the concrete seven-jump method which is to be followed when working with PBL. These seven “steps” are, according to Dejan Bokonjic, (2009) and Henry Egidius (1999b), as follows:

**1. Clarifying terms**– First, the group of participating students draw a table on the board in the classroom, consisting of four columns: Facts in the text, Problem, Hypotheses about cause and effect, and Learning objectives. The text with the problem to be identified and solved is then introduced to the students, and unknown terminology is explained and clarified. After this the facts presented in the text are listed in the “facts in the text” column on the board.

**2. Defining the problem**– The second step consists of group discussions of what the problem is and which methods can be used to find the solution. The identified problem is then written down in the “problem” column on the board.

**3. Brainstorming**– Another group discussion is held where the students use their prior knowledge to come up with ideas for different hypotheses to explain the problem. During this step all students are encouraged to speak their mind and all ideas are valued and noted.

**4. Structuring and hypothesis**– A review of step 2 and 3 is carried out and different possible explanations of the problem are given, eventually leading up to one final structured hypothesis, which is then written down in the “hypotheses about cause and effect” column.

**5. Learning objectives**– When the hypothesis is chosen and formulated the students must agree on achievable and comprehensible learning objectives for the task. These objectives will be the necessary knowledge the students need to acquire before they will be able to continue on working with their hypothesis. These learning objectives are written down in the “Learning objectives” column on the board.

**6. Searching for information**– The search for information is done individually and with emphasis on mutual learning objectives. This will provide the students with a more profound knowledge regarding the problem they are working on. The minimum time for this research is two days, but can preferably go on for a longer amount of time, since the students are given the opportunity to find their own resources and might need the extra time to research their credibility.

**7. Synthesis**– During the final step the members of the group share the results of their individual findings, including structures, functions, causes etc. with each other. With this new information they analyze the stated problem and, hopefully, they come to an understanding of, and solution to the identified problem.

**8. Feedback**– Feedback is given both from the students and the teacher, regarding their individual and group process, the organization of the task, and the teacher’s guidance. This is done with the aim of improving the work process for the next session.

#### **1.4 Background (Development of PBL)**

Throughout the history of teaching, there has been a debate concerning the most efficient and effective way for teachers to teach their students as well as how the students learn and acquire new knowledge. This debate has led to the development of several different methods, whose founders all state that their method is the most efficient and suitable one. These methods are all based upon different theories about how we learn and acquire new information.

Barrows writes that students attending medical school felt bored and unmotivated by their studies as a result of the “the vast amounts of information they had to absorb, much of which was perceived to have little relevance to medical practice” (1996, p. 4). As there is a general consensus that motivation is critical for students’ learning (Moskovsky, Alrabi, Paolini, & Ratcheva, 2013) this was of major concern for medical schools. As a result of this discontentment among students a new medical school was established at the McMaster University Faculty of Health Sciences. This school used a new and innovative method for teaching their students, which today is known and used worldwide. The name of this method is Problem-Based Learning, PBL.

However, the use of PBL within medical schools did not spread until it was introduced at Harvard Medical School in 1987. The introduction of this problem-based method brought with it several consequences; such as a new curriculum, fewer lectures, and focus on small-group work designed to ensure that the students understood and searched for information necessary for solving a certain problem with relevance for their future profession within medical care (Egidius, 1999a).

As we suggested, existing learning methods are all based on different theories focusing on how we acquire new information and how we learn. PBL is no exception to this and similarities can be found in, as well as parts borrowed from, Donald Schön’s “reflective practitioner”, John Dewey’s “learning by doing”, David Kolb’s learning circle, Piaget’s cognitive development theory, Krashen’s input hypothesis, and Vygotsky’s concept of the Zone of Proximal Development and scaffolding. In 1983, Donald Schön, an American educational theorist, published *The Reflective Practitioner*, a book which caused a lot of commotion as it questioned the established idea of researching facts as the basis for more practical professions, such as medicine. Schön believed the previous methods excessively controlled what students had to know and that they consequently did not get a chance to develop and broaden their knowledge sufficiently. They used their theoretical hunches to guide experiment, but on several occasions their moves led to puzzling outcomes – a process that worked, a stubborn defect – on which they then reflected. Each reflection period gave rise to new experiments and to new phenomena, either troublesome or desirable, which led to further reflection and experiment (Schön, 1983, p. 176).

The PBL-method has adopted the very basis of the reflective practitioner where the students are faced with situations and problems that to be solved acquire, for the students, new and previously unknown knowledge. To help the students reach these premises the teachers will “challenge the prevailing knowledge structure” and “conflicts and dilemmas would surface and move to center stage” (Schön, 1983, p. 335).

The American philosopher John Dewey introduced the concept of “learning by doing”, which is a pedagogical method based on problem solving. John R. Savery (2006) describes Dewey as a man “who believed that education begins with the curiosity of the learner” (p 16). Dewey reckoned that a student will not learn or understand much if he/she does not actively experiment with those phenomena that he/she wishes to acquire knowledge about. Egidius’ (1999b) comparison of “learning by doing” and PBL shows that both are methods where theory, practice, reflection, and acting are interconnected (p.35ff). A student’s knowledge must be useful and have a connection to real life. The students should be engaged in the assignment, observe facts, and they must come up with ideas for how to solve the problem. The search for a solution starts with the students imagining different scenarios for solving the problem, the potential outcomes, and choosing the hypothesis they decide will most likely be successful.

The American psychologist David Kolb introduced the theory of experiential learning during the 1970s to 80s. This is a theory which has its foundation in concrete experience: an experience that is both emotional and intellectual (Egidius, 1999b). This experiential learning is based on the interplay between 1) active experimentation which leads to a concrete experience 2) a creative reflection regarding the experience 3) which in turn leads to a formation of concepts and theory 4) and lastly an ability to apply these concepts on practical assignments (Egidius, 2008). This interplay is commonly known as Kolb’s learning circle and

It shows how important it is to get familiarized with the situation and its different aspects before one starts acting. Egidius continues to describe the similarities between the seven jump of PBL and the four parts of Kolb’s learning cycle, emphasizing that even though one can start anywhere in the learning circle, it is preferred

to start with the active experimentation, which is similar to the first step in PBL's seven jump program. While doing this, the learner will "follow the same steps and cycle leading up to the new knowledge" (1999, p. 37).

One of the first to study the thinking patterns of children was the Swiss developmental psychologist, Jean Piaget. Piaget observed the activities of children and later developed tasks to test developmental growth in the children. From this observation came Piaget's idea that cognitive development occurs in stages and that this development progresses through active interaction with the environment and the development of "schemes". This "active interaction" is one of the major components of PBL. Piaget suggests that these schemes are built through self-directed, active interaction and when a new situation, or problem, arises we try to apply our scheme to a new situation (Qayumi, 2001).

Lev Vygotsky, a social constructivist, suggested the idea of the zone of proximal development (ZPD) which is the difference between what a learner can do on their own and what they can achieve with teacher help or scaffolding. He suggests that learning is achieved by imitating and modeling more experienced learners and that social context is required for learning and development (Gebhard, 2008, p. 948). He further suggests that learning and development require authentic tasks to achieve the learner's full potential. Authentic activities must be relevant to the learner, in other words a "real world" activity. Lastly, Vygotsky suggests that learning is a personal process and in coordination with real-world activities motivation of the student is increased as disinterest decreases (Gebhard, 2008). These factors can be seen in the underlying principles of PBL. Real-world, relevant, authentic situational learning is of core importance to PBL in the medical classroom and the role of the tutor fulfills the need for experienced scaffolding and imitation while peers provide the social learning aspect.

According to the American constructivist Stephen Krashen, the distinction between learning and acquisition is fundamental. Acquisition is how we learn our native tongue as small children whereas learning is a conscious process involving a "teacher" or formal instruction.

Acquisition is a subconscious process involving meaningful interaction with the target activity (in this case language) which requires a +1 difficulty level that is just beyond the student's current ability, similar to Vygotsky's ZPD. In terms of language acquisition Krashen suggests that natural communicative input is paramount to learning (Krashen, 1981). Real-world situations and natural communication between students are also major components of PBL.

## **2. LITERATURE REVIEW**

This chapter will provide an introduction of all the literature that we have chosen to use as our sources in this paper. They are divided into different themes, which are common in the different works, to provide a general idea of the literature used and facilitate the understanding of what we have been searching for. The themes are also designed in a way to follow our questions stated in the objective of this paper. Finally, some of our chosen literature lacks publication location and date but we deemed these articles reliable following research of the author(s) in question. The following sections are divided into pro PBL, neutral PBL, against PBL, factors affecting the effectiveness and implementation of PBL, and literature concerning the ethical considerations of PBL research.

### **2.1 Pro PBL**

According to Barrows & Tamblyn (1980) and Egidius (1999a), PBL is a full system (holistic approach) requiring an intensive curriculum shift as well as cooperation and full support from both teaching staff and administration. Barrows' implementation at McMaster University was a paradigm shift in the way the school operated in response to student's disenchantment and boredom with the current course load which they also felt "had little relevance to medical practice" (Barrows & Tamblyn, 1980). Barrows & Tamblyn point out that PBL is not simply presenting problems to students but a rigorous, structured approach to learning. Victor Forrester & Juliana Chau (1999, p. 10) also suggest that PBL represents a paradigm shift in the way that teachers teach, creating "active questioners" instead of "passive acceptors". It is further suggested by Sandra Kemp (2011) that the adaptation of PBL requires implicit and explicit commitments to the method in terms of stages, roles and assessment methods. The first of these stages requires the teacher (tutor) to accept, or have faith, in the social constructivist theoretical base on which PBL is based and an understanding of constructivism, which is essential to implementation (p 48f).

Woei Hung, David Jonassen & Rude Liu (2008, p. 493) further emphasize the need for a "dogmatic" approach to the tutors' roles, knowledge and assessment. Mark J. Newman's (2005) article, Problem Based Learning: An Introduction and Overview of the Key Features of the Approach, provides empirical research into both the effectiveness of the approach as well as a concise summary of the necessity of the key features.

Antonia Scholkman & Bianca Roters' (2009) study shows that the use of an inductive method, such as PBL, has a positive influence on students' self-assessment abilities. Lastly, Gaétan Breton (2010) provides empirical data based on the implementation of PBL using very strict parameters which follow the "core values" of the method and reflect the necessity of adherence to the core elements.

### 2.2 Neutral PBL

Egidius (1999a) is one of the few advocates of the view that PBL must not be the only teaching method used in the classroom, but it may also be used as a complement to lectures and lessons on condition that it is used consistently. Bokonjic, (2009) has also mentioned this view and the possibility to modify "the seven jumps" according to one's will and learning aim. However, Egidius argues for the importance of using PBL as a complement consistently throughout the school year (1999a).

### 2.3 Against PBL

Problem based learning is a method that has been highly commended but at the same time criticized. The main criticism raised against PBL is that it is not suitable or applicable for all types of education and that there is a lack of evidence supporting the effectiveness of this theory.

John Sweller (1988) argues in his article, *Cognitive Load During Problem Solving: Effects on Learning*, that the sole use of problem solving methods will interfere with the students learning and not allowing them to analyze and solve newly introduced problems. Woei Hung (2008, p. 530) argues that there are a too great a number of variables affecting the students learning outcome in experiments that are supposed to prove the effectiveness to give a trustworthy result. Newman (2005) and Graham Parton & Richard Bailey (2008) argue that one of the more crucial problems with PBL is that there does not exist one "single unanimous position about the theoretical basis for, or practice of, Problem Based Learning", and that "there is not even agreement about whether there is or should be one type of Problem Based Learning or many variants" (Newman, s. 12).

Paul Kirschner, John Sweller & Richard Clark (2006) criticize the concept of the tutor as a facilitator and argue that it is in direct conflict with the foundations of what we as humans need to be able to acquire knowledge. Maggi Savin-Baden & Kay Wilkie (2004) point out that Barrows in his article *A taxonomy of problem-based learning methods* (1986) expressed concern "that inadequate tutoring of Problem-Based learning groups would affect the effectiveness of Problem-Based Learning as a strategy" (p 65).

Furthermore, Savin-Baden & Wilkie state that there are no results presented in regards to the effectiveness of the role of the tutor. It is further argued by Alan Neville (1999) that the present role of the teacher needs to be revised and redesigned for a teacher to be able to function as a facilitator. Without the needed teacher competences the expected learning outcome of the implementation of PBL will not be realized.

### 2.4 Factors affecting the effectiveness and implementation

When using a teaching method as PBL one of the most crucial aspects to consider is the method's effectiveness and how suitable it is for all students, both weaker and stronger. The evidence of the effectiveness in regards to weaker and stronger students is conflicting. Lisa-Angelique Lim & Magdeleine Lew (2012) state, in their article *Does Academic Performance Affect the Challenges Faced by Students in their Initial Adaptation to a Problem-Based Learning Environment?* that two studies made by Samsonov in 2006 and Klein in 2007, have reached the same conclusion: the prior academic studies result is crucial for how students will perform in a PBL assignment. The study by Chi Ho Henry Wong, Mei Chu Evelyn Wong & Siu Lun Terence Tang (2011) examined the effects of introducing an inductive PBL teaching method in the classroom with interesting results. The findings show that brighter students benefit more from the inductive approach than the average students.

This is further supported by the findings by Michael J. Prince & Richard M Fender (2006), who have been investigating the effectiveness of different inductive approaches. However, the findings of V.C Burch, C.N.T Sikakana, N Yeld, J. L Seggie & H.G Schmidt (2007) also examine the same phenomenon and their findings showed opposing results.

When planning a lesson the goal and preferred outcome are always based on the curriculum; it is the curriculum which "determines how the learning environment is organized" (Poikela & Poikela, 2005, p. 12). Poikela & Poikela (2005) thus argue for the importance of a PBL-focused curriculum. Joseph Tiangco, an associate professor at the Shu-Te University, states that the manner of assessing an assignment is based on the goals stated in the curriculum and Gillian Xiao-Lian Tai & May Chan Yuen (2007) describe in their article the different manners used to assess a PBL assignment correctly.

Wim H Gijsselaers & Henk G Schmidt (1990), address the issue of how to evaluate students' learning outcomes when using PBL as a teaching method, since the methods available today are not suitable for the PBL classroom.

### **2.5 Literature regarding “Ethical concerns”**

For ethical concerns and guidelines we turned to the guidelines from God Forskningsråd (Good Research Ethics) published by The Research Council of Sweden (2011). These guidelines first and foremost state that “the challenge is to optimize the possibilities to take advantage of the positive effects of the research while minimizing the negative.” As we are Swedish students, in Sweden, we used these guidelines primarily. Further, as most of the research guidelines are based on, and agree with the ethical principles and guidelines set out by the Department of Health, Education and Welfare, we have included it as a cited source.

### **3. METHOD**

The following chapter gives an account of the strategy used to gather the information that we needed to answer our questions stated in the objective of this paper. A detailed overview of the data gathering process and the data analysis is also given to provide a clearer view of our working process. The chapter presents the ethical concerns and problems encountered during the working process as well as a discussion concerning weaknesses and strengths of the method chosen.

#### **3.1 Implementation**

The first purpose of our paper is to take an impartial and critical look at PBL and our data collection needed to reflect this impartiality. We discovered that it is easy to find data using keywords such as “problems with PBL” or “Is PBL effective in today’s classroom” which would create a biased literature base. A further issue is that the definition of PBL in itself is biased as Barrows’ own research and theories led to his creation and dogmatic implementation requirements of Problem-Based learning.

Therefore, we are basing our paper on his definition of PBL and his implementation requirements of the method; we refer to this as “dogmatic” implementation. In an attempt to further reduce the biased nature of the research we also took a critical look at the methodology of the selected research.

#### **3.2 Data Collection**

The search engine was our main source of data collection. We conducted our impartial literature search using basic keywords, in English such as; PBL, elements of PBL, PBL in the classroom, PBL in higher education, teaching methods, learning theories, PBL and ESL/EFL, and Problem-Based Learning.

These general search terms provide an extensive list of general literature which provided a basic starting point for the definitions and researchers involved in both current PBL research and the background of PBL theory.

#### **3.3 Processing the literature**

The general search led to an extensive list of research articles, journals and books which we further narrowed down using more specific search words but continuing to attempt to hold to impartiality. We narrowed down the search to the central figures in PBL and learning theories including; Barrows, Piaget, Chomsky, Dewey, Vygotsky, Schön, Kolb, and Krashen. We then created a matrix of the learning theories to confirm our assumption that PBL is an amalgamation of elements taken from other learning theories.

Perhaps the most difficult literature to sift through was regarding our “neutral” stance of PBL. As most research is biased, in one way or another, we tried to limit our neutral PBL research search to the originators of the method or those referring to them. Neutral PBL research was searched for using neutral search terms such as “PBL theory”, “PBL in the classroom”, “the implementation of PBL”, and “Problem-Based Learning”. Using the criteria of date written (as close to the original research as possible), references (to the original theories), institution (established research centers such as Harvard), research methods, and critical discourse analysis (register) we tried further to limit the bias our neutral literature collection.

We then narrowed the list further with a quality appraisal. This involved evaluating the methodological quality, precision, and external validity of the articles or books. External validity is of special concern for us as we are looking for PBL research as it pertains to our teaching field, English. The majority of PBL research is conducted in “hands-on” and “problem-solving” type environments; in particular math and medicine. As laid out by Vetenskapsrådet (The Research Council) (2011) in Sweden, strict guidelines and regulations apply to human subject research. In concurrence, the Belmont Report on Research Ethics in Medicine (1979) lists autonomy, beneficence, and justice as the three major concerns. Autonomy means that the researcher must treat the research subjects as individuals with the ability to make informed decisions and be given informed information about the study as well as full disclosure of the risks involved, benefits, alternatives and the opportunity to ask questions. This asks the question “given the choice of two teaching methods, would I choose to be in the control group or would I prefer the new, better method?” Autonomy also refers to the independence of the researcher and the freedom from influence by parties with other interests in mind. For example, PBL

“packages” can be purchased from various suppliers who tout the benefits of the model and the results but do not cite research sources of their claims. We next needed to find unbiased literature highlighting the benefits or problems with Problem-Based Learning. This limitation affected both the methodological quality and precision checks. As mentioned above, it is easy to search for “problems with PBL/ Advantages of PBL” but this returns biased literature so to avoid this we chose articles and books using those search words, and examined them using the following criteria; Date written, references, institution, research methods, and critical discourse analysis (register) to minimize the biases. We then created another matrix to discover the commonalities of the pros and cons to form a loose generalization of the largest influential factors.

### **3.4 Ethical concerns of the research**

First and foremost, this research deals with student’s lives and futures so one cannot use quantitative research methods. One cannot create a “control” group and teach them using a certain teaching method while testing another group with another method. The ability to control the variables in this situation, and then generalize the results, is next to impossible.

Beneficence refers to the need to maximize the benefits of the research while minimizing the risk of harm (Vetenskapsrådet, 2011). This again prevents a researcher from using real-time students as test subjects because the hypothesis of “one method is better” automatically gives one group an inferior education, or at least suggests that one group must get an “inferior” method of teaching to test if the second method is superior.

Lastly, justice refers to the selection of test subjects. Test subjects must be chosen equally from a population to distribute the proposed benefits and burdens. And again we come to the problem of using real-time students as test subjects. All students are different with different needs, backgrounds, personal situations, study habits and on and on. Neither can all of these variables be accounted for nor can the results be generalized to apply to anything larger than the test class itself.

### **3.5 Problems encountered**

One of the major problems we encountered when writing this paper was the lack of research concerning the effectiveness of this method. The studies found that concerned the use and effectiveness of PBL were few and the information given about them vague and to some extent incomplete. In most cases the research method was not mentioned and research was based on previous research or their own, resulting in a biased result.

The source presented various examples of real-life situations in which PBL had been used, but gave no empirical evidence for why, or even if, PBL gave better result than any other method used. Another reason for the lack of research and reliable empirical evidence is due to the ethical concerns mentioned above.

When writing a thesis paper based on research done by others, it is not possible to have a final result that is 100% unbiased. In every paper and book written, traces of the author’s personal feelings for the subject will be found. We have, as a result of this issue, tried to find as many sources of research arguing for PBL as a teaching method as arguing against it, in an attempt to make this paper as unbiased as possible.

One of the criteria for determining whether or not a source was reliable was the discourse analysis mentioned above. However, a full discourse analysis of the language used in the research we used was not achievable within the time and context of this paper, thus leading up to a very basic and not as detailed analysis as we had hoped for. Because of this, the reliability of some of our sources may to some extent be questionable, but we do argue that the analysis still provided us with the help needed to sort the sources according to relevance and reliability.

During our search for sources we understood that our findings to a great extent depended on what search words we used, resulting in the possibility that we might have missed out on some important sources because we did not use the search words corresponding with the source keywords. We tried to vary our search words, but it was impossible to go through all the different possibilities of combinations as well as going through all of the results from the searches.

Furthermore, we decided to read the abstract of the sources found to make a first selection concerning their relevance for our paper.

However, some of the abstracts we went through were poorly written and we decided not to include them as sources in our paper, even though there is a possibility that these abstract were parts of articles and books that, potentially, could have been reliable and relevant sources.

Lastly, because PBL was designed for the medical profession, the vast majority of the research concerns the medical field. This, of course, caused a major bias toward the method as students entering medical school are

already the upper-achievers, if not the very top of their class. This generalization problem is perhaps one of the most difficult to overcome.

#### 4. RESULTS

In this section we will present the findings of our research regarding the effectiveness of PBL as a teaching method. The result is presented in the same order as our questions were stated, and under headings corresponding to the themes in the literature review.

##### 4.1 The Advantages of PBL

The limited quantitative research shows that there are advantages to using the

PBL method, which is based on elements of the inductive and constructivist learning theory.

###### • 4.1.1 Effectiveness

Wong, Wong and Tang (2011) studied the effectiveness of adopting an inductive approach, such as PBL, in the classroom. This study was conducted on a sample of students chosen from the class to represent the strongest, middle and weakest students using the results of the English admissions test. The teacher introduced an inductive method covering the English topic of “wh-” questions; who, what, where, when, which, how and why. They were then tested on their retention of knowledge with a short test concerning grammatical accuracy. The results were compared to examine the efficiency of adopting an inductive approach as well as how varied ability of the students affects the efficiency of an inductive approach.

The quantitative findings show that brighter students, who achieved a mean score of 6 out of 7 benefited more from the inductive approach than the average (mean score: 3.5) or weaker (mean score: 2.5) students (p 177). The study also examined qualitative data in the form of an interview with the same students to take a more in-depth look at the effectiveness of an inductive approach.

The interview posed questions from a more personal angle and was conducted in their L1 to illicit free and clear responses. The interview asked the following questions:

1. Which approach did you find more interesting?
2. Which approach did you find more useful?
3. Would you like to learn grammar using an inductive approach or a deductive approach? Why?
4. What were the difficulties encountered when learning grammar using an inductive approach? How did you overcome the difficulties?
5. What kinds of students do you think are suitable for an inductive approach to learning grammar? Why?
6. Do you have any other comments or suggestions regarding the two approaches to grammar learning?

The results of this interview demonstrated that from the students' perspective an inductive approach was more interesting and allows them to think more freely and contributed to their problem solving skills. The students further cited peer interaction and independent thinking as positive aspects of the approach.

Lim & Lew's (2012) article, Does Academic Performance Affect the Challenges Faced by Students in their Initial Adaptation to a Problem-Based Learning Environment?, follows 1019 students in their first year at an unnamed local polytechnicschool which uses PBL as its sole method in diploma programs. A quantitative surveyconducted at the end of the first year (see appendix 2) questioned the challenges theyfaced in adapting to PBL pedagogy. The first result demonstrated that previousacademic performance had no significant effect on the challenges faced by students andthat PBL was not detrimental to weaker students but did show that weaker studentsoutperformed stronger students in problem-solving skills (2012, p 7). The second resultdemonstrated a strong correlation between teamwork and performance supporting theclaim that good, positive interaction with others in the team leads to better performance,which is one of the core concepts of PBL pedagogy (Lim & Lew, 2012).

The analysis of PBL implementation suggests that PBL improves academic performance and may reduce dropout rates of disadvantaged students compared to the disadvantaged students in the regular ADP (Burch et al, 2007, p.354). Results concluded that PBL retention rates and academic performance are significantly better for at-risk students compared to the ADP program (Burch et al. 2007, p 354).

The PBL method requires the students to develop self-directed learning skills as well as team skills which are necessary to become independent learners in the medical field. The author cites a 20-year study (Albanese and

Mitchell, 1993; Vernon and Blake, 1993) which shows that PBL may increase problem-solving skills and that students are stimulated and motivated by the method (Barrows, 1996, p. 10). Lastly, Barrows & Kelson (1995) have been working at the high school level and have positive results from teachers who see PBL as a way to engage and stimulate students.

A study by Scholkmann & Roters at the Technische Universität of Dortmund (2009) measured the effects of PBL and the professional development of teachers in Germany, Sweden, and the Netherlands. This study concludes that there is no negative effect on the acquisition of knowledge but positive effects on self-assessment abilities, better performance in problem solving and in practical tests (2009, p 5). They cite positive mood alongside problem-based testing, formative evaluation, and portfolios as keys to success (Scholkmann and Roters, 2009).

Egidius (1999b) suggests that working with PBL prepares the student for work life and focuses on group processes between peers instead of the individual, which is advocated in today's modern workplace. PBL teaches from reality to knowledge, not the opposite which is common in lecture teaching, and solves the problem of connecting facts and issues associated with theory as well as assisting in long-term retention. In today's results-driven workplace, the ability to problem solve is a requirement for students entering the workforce and PBL has been shown to develop these essential skills. Egidius (1999b) further suggests that the teacher's role is to provide the students not only with knowledge but to ensure that they have the ability to acquire it on their own. "We can thus very roughly distinguish between two types of training. One follows the PBL philosophy fully.

The second type is a course where PBL is used as one of many forms of work in a teacher-guided instruction where PBL exercises can be a valuable complement to the teachers 'teaching'" (p. 16). Breton's (2010) article "Some empirical evidence on the superiority of the problem-based learning (PBL) method supports the claim that PBL produces better results than lecturing in terms of students' perceptions of acquisition and retained knowledge, long-term problem-solving skills and grades (Breton, 2010, p. 10). This study compares these parameters between traditional lecturing, exams, and assignments with a class taught using an approach. The case study material involved two accounting classes at the University of Montreal over a period of 15 weeks taught by the same teacher using the two different methods. This study shows that students from the experimental group have significantly better results in case-study questions as well as theory-based questions and considered the method to be useful over time (Breton, 2010, p. 11).

Lastly, Kuruganti, Needham & Zundel (2012) suggest in their article "Patterns and Rates of Learning in Two Problem-Based Learning Courses Using Outcome Based Assessment and Elaboration Theory that, although there are differences in the learning curve, two different courses, Math/Econ and Forestry, benefited from a problem-based method. This study suggests further that the problem-solving skills acquired in the first attempt at a problem are carried on to, and improve, the next attempt. Although this article does not imply that PBL improves knowledge retention, it does suggest that the problem-solving skill is developed through repeated use of the method (Kuruganti, Needham, & Zundel, 2012).

#### • 4.1.2 Implementation / Curriculum

The guidelines require that students be given the tools to be able to "formulate, analyze and solve problems, reflect over their experiences and their learning, and to solve practical problems and assignments" (Skolverket, 2011, p. 8). As the above results show, PBL is a method which contributes to the development of all of these abilities.

The ideal, most successful, PBL situation is whole-school implementation. Barrows (1996, p. 6) suggests that with a shift, not only the shift of teaching method by one teacher but a department-wide or institutional shift, many advantages can be reached. PBL allows the teacher to see what the students are thinking, what they know and how they are learning and allows teachers to intervene early if any students have difficulties. Barrows further suggests that the students will be alert and motivated instead of being bored or passive (1996, p. 4). Barrows (1996, p. 9) further suggests that by not providing the students with the learning objectives they may pursue areas of study outside of the curriculum.

#### • 4.1.3 Assessment

PBL incorporates many forms of assessment, such as portfolios, self-reflection, and peer evaluation. According to Tai and Yung, these forms are all needed to reflect the various facets of self-assessment. For example, a portfolio allows the student to not only see the learning outcome but the learning progress as well (Tai & Yuen, 2007, p. 992).

As stated in Hung, Jonassen & Liu (2008), the ultimate goal of PBL is for students to be self-motivated, independent learners. By using peer review and self-assessment from group interaction students build independence and problem-solving skills on their own. Studies of the long-term benefits of PBL have shown that these skills follow students into their professional lives and give them the tools to be better prepared in terms of inter-personal skills, professional skills, and the ability to plan efficiently and independently (Hung, Jonassen, & Liu, Problem-Based Learning, 2008).

These findings are supported by research showing that authentic self-assessment leads the students to be able to identify their own deficiencies and progress which further builds on the ideas of independent learning (Tai & Yuen, 2007).

Finally, in traditional classroom settings, narrow assessment focuses on rote memory rather than true understanding. PBL assessment incorporates the larger concepts involved and concentrates on thinking and reasoning skills (Waters & McCracken, 1997).

#### • 4.1.4 Role of the Teacher

The guidelines state that learning should be student centered, and as teachers we need to convey the societal values of Swedish society (Skolverket, 2011). The teacher is not just facilitating knowledge but guiding students to discover and learn on their own.

Forester and Chau (1999) conducted research to explore the idea that PBL represents a fundamental paradigm shift in pedagogy. This paradigm shift means that students who are free from internal limitations, such as fear of being incorrect, can achieve a confidence boost from an interactive facilitator of knowledge (1999). Further, Forester and Chau suggest that with this paradigm shift to PBL creates an atmosphere in which social competence, sharing feelings and establishing relationships, is developed not only by the students but also by the facilitators or teachers (1999).

#### 4.2 The Disadvantages of PBL

As in the previous section, we will present the disadvantages of PBL in the same order as our initial questions.

##### • 4.2.1 Effectiveness

During its' relatively short lifespan, the teaching method PBL has faced both praise and criticism, and one of the strongest proposed criticism is that PBL is not suitable for everyone. There are not many studies with focus on the suitability of PBL to be found, but those we have encountered have all come to the same conclusion: PBL benefits the stronger students, and not the weaker. Even though the study conducted by Wong, Wong & Tang (2011), as mentioned above, demonstrated that students did prefer inductive teaching rather than deductive, and PBL is considered to be an inductive teaching method, it also demonstrated that the weaker students' development did not benefit from an inductive method of teaching. This is further agreed upon by Lim & Lew (2012) in their article, Does Academic Performance Affect the Challenges Faced by Students in their Initial Adaptation to a Problem-Based Learning Environment? In this article the authors turn our attention to two separate studies by Samsonov, in 2006 and by Klein, in 2007, both investigating the factors which affect students' performances in the PBL classroom: problem behavior, socioeconomic status, previous academic achievements, and scaffolding. Both reached the same conclusion: the students with greater prior academic performances did better in the PBL assignments than those with less prior academic performances.

Lim & Lew's own study of 1019 students, as mentioned above, (the questions used in the study are attached as appendix 2), reached a similar conclusion: the weaker students, who had trouble performing in the subject studied, in this case English, also faced greater challenges in the "presentations, the learning process, and resource management" as well as discovering that the students "found it a challenge to work together in teams /.../ analyze, and synthesize information towards a solution" (2012, p.4) due to the fact that their English skills were not at the required level.

At the Aalborg University in Denmark Problem and Project Based Learning has been used as complement to other teaching forms, where the students meet once or twice a week to keep the manner of work fresh in their memory. At this university many positive aspects of Project and Problem Based Learning have been observed. However, Michael J. Prince & Richard M Fender (2006), who have been investigating, among other things, the effectiveness of Project and Problem Based Learning at the Aalborg University, write in their article Inductive Teaching and Learning Methods: Definitions, Comparisons, and Research Bases, that the authors note that "the experience seems to accentuate the differences between strong and weak students, with the latter being more likely to become demotivated and to make less progress in the distance environment than they do in a conventional classroom environment" (Prince & Felder, 2006, p. 15).

Yet another criticism aimed at PBL as a teaching method is that there is a lack of research and thus a lack of evidence supporting its effectiveness. Hung (2011, p 530) states that studies carried out with the same research question as their foundation have come to conflicting results. He also argues that the existing evidence regarding the effectiveness of PBL cannot be seen as trustworthy because of the vast number of variables affecting the student's desired learning outcome when conducting the investigations and studies. So far, there is no single method for evaluation, but several to evaluate the effectiveness of different teaching methods. However, these methods only focus on the learning outcome and "they ignore the influence of the instructional and learning processes [sic] on the final student-learning results" thus not taking the significant part of the PBL method into consideration (Gijsselaers & Schmidt, 1990, p. 96).

Hung continues by pointing out that the use of PBL within medical schools and engineering programs as a functional method to develop future problem solving skills is a questionable concept. He bases this assumption on a study compiled of 13 studies which "surveyed medical school graduates' competences from 1 to 23 years after graduation," and showed a result with a "weak level of evidence supporting the claim that PBL promotes problem solving skills" (Hung, 2011). He continues by claiming that ritual behaviors undermine the student's learning and defeat the objective of developing problem-solving and self-directed learning skills, as well as that the "theoretical assumption that problem-driven instruction motivates students' active learning" is a wrongly formed assumption that lacks evidence supporting it (p 539).

The debate concerning whether or not PBL should be used as the single teaching method for a class or an entire school, or if it should be used as a complement to other teaching methods is still ongoing today. Sweller (1988) argues in his article *Cognitive Load During Problem Solving: effects on Learning* that the sole use of problem solving methods will interfere with the students learning outcome. This is, he argues, because of the fact that students develop, when using PBL, cognitive schemas which make them able to group together the problems they encountered, according to their schemas, and the knowledge they have lead up to.

Furthermore, the students will, instead of analyzing and solving the problem, separately apply the already developed schemas and knowledge for how they have learned that a similar problem should be solved, thus not leading up to a further learning outcome (Sweller, 1988, p 261f).

Although PBL proved to be an effective method according to Perrenet's article on the effectiveness of PBL in the Engineering classroom, it needed to be adapted to meet the specific requirements of the program. Specifically, Perrenet suggests that the knowledge required in engineering is sequential, or each part is needed to move on to successive parts, and cannot be acquired through a hands-on approach (Perrenet, Bouhuijs, & Smits, 2000, pp. 355-356).

Lastly, as mentioned in the benefits section, Kuruganti et al (2012) suggest that there is no increase in knowledge retention and that factors such as prior knowledge and entry grades play a bigger role in the assesment of what is "learned".

#### • 4.2.2 Implementation/Curriculum

One of the major problems a teacher faces using the PBL method is, according to Egidius (1999b), today's large classroom sizes. Due of the number of students in a class there are very few classes in which one can conduct a PBL session. Egidius (1999b) suggests that the optimal group size should be between five to eight students (p. 52). To be able to conduct a PBL session the teacher needs to divide the class into several small groups and guide all of them at the same time, resulting in difficulties for the teacher to follow each group's' progress and problems.

As mentioned before, the goals of a planned lesson must be based on the goals of the curriculum, and the curriculum is written with guidelines for the entire school and not separate classes. Poikela & Poikela (2005, p. 58) claim that to be able to use PBL as a teaching method, the curriculum must provide goals and guidelines according to this method, which means that a curriculum based on the ideas of PBL needs to be used by the school, thus resulting in the entire school working with the PBL method, and not separate classes. This results in problems for Egidius' (1999b) idea that one can use PBL as a complement to other teaching methods. To be able to do this, the teacher must make sure that what they have planned as a PBL activity follows the goals and guidelines of the school curriculum, which will provide a lot of extra work and time for the teacher.

Newman (2005) and Parton & Bailey (2008) both discuss the fact that, among teachers using PBL as a teaching method, it is not clear exactly what is presented to students in the true name of PBL. Today there are several versions, or hybrids, of the PBL approach; each consisting and including certain aspects of the PBL method as described by Barrows (1996, p. 5f), and each adding and adopting new ones. The fact that there is not one

“single unanimous position about the theoretical basis for, or practice of, Problem Based Learning”, and that “there is not even agreement about whether there is or should be one type of Problem

Based Learning or many variants” leads to questions being raised concerning the reliability of the studies done focusing on PBL and its effectiveness (Newman, 2005, p 12).

The transformation from the traditional teaching methods to a PBL-centered teaching method takes time and money. According to Berkson, as quoted in Burch, Yeld, Seggie & Schmidt (2007), the findings of a study conducted in South Africa, focusing on the implementation and the effectiveness of PBL, says that PBL has a “considerable potential implications for medical education in South Africa in the face of the relatively greater financial costs inherent in PBL programs” (Burch et al. p.355).

#### • 4.2.3 Assessment

One of the major problems a teacher working with PBL faces is the manner of assessing the students work and progress. To accomplish this teachers need to use other methods than simply providing the student with an exam which will test their rote knowledge of a subject, or giving them a grade on a paper written. A PBL assignment is based on problem solving skills through group work, and the questions to be answered here is: how do you assess a student’s problem solving skills? Further, how do you test, or assess, interaction or group work? Tai & Yuen (2007) states that when “assessing PBL, authentic assessment seems as a more appropriate means to assess learning compared to traditional assessments such as norm-reference and standardized testing that assesses recall of factual content knowledge” (p2). Ranald MacDonald (2005) and Tai & Yuen (2007) describe in their articles different manners used to assess a PBL assignment, and Tiangco writes that “the assessment phase should focus on evaluating acts of creativity, problem-solving, self-management, and teamwork” (p. 5). However, it takes much more effort and practice from the teachers to be able to apply the different methods of assessment in a correct and functional way.

One crucial aspect of PBL is self-assessment; the students participating in a PBL session “have to make statements about what they already know and can do and where there are gaps in their knowledge and competences” (Macdonald, 2005, p. 86). Teaching the students how to self-assess will be an important part of the teacher’s job.

#### • 4.2.4 Role of the teacher

According to Barrows, the role of the tutor in a PBL classroom is not to convey knowledge to the students but rather to facilitate their learning experience. The students are supposed to understand and determine what it is they need to learn and how to do this on their own with only guidance from the tutor (Barrows & Tamblyn, 1980).

Neville (1999) argues that it might be problematic for a teacher, who is accustomed to giving lectures and thus providing the students with the necessary knowledge, to adopt the different role as a tutor. The author continues by stating that there is a risk that the teacher will become a “wallflower”, not providing the students with any help or guidance, or that the teacher will continue with their accustomed role as a lecturer (Neville, 1999, p 393).

Yet another problem addressed by Neville is that the PBL focused curricula developed at different faculties do not follow any unanimously determined guidelines for the tutor, which leads to a confusion regarding how the tutor role should be realized (1999, p. 394). The role of the tutor must be revised, redesigned, and clearly stated in the curriculum as to facilitate the teacher’s transformation from the lecturer to the facilitator before PBL can be a truly functioning method to use in the classroom. Hung (2011) also addresses the problem of inexperienced tutors. For PBL to be an effective approach the group management is a crucial part of the tutor’s job. Hung states that to be able to handle this issue in a satisfactory way, in regards to student development, it “requires sophisticated tutoring and group management skills, which are often not readily possessed by the first-time instructor” (p 542). An inexperienced tutor can thus affect the students’ learning outcome in a negative way.

Research concerning how people learn and what we need to learn shows that “the structures that constitute human cognitive architecture point to the importance of emphasizing guidance during learning” (Kirschner, Sweller, & Clark, 2006, p.75). Kirschner, Sweller & Clark emphasize that even though the use of minimal guidance within PBL has been used for almost 40 years “there is no body of research supporting the technique. Insofar as there is any evidence from controlled studies, it almost uniformly supports direct, strong instructional guidance rather than constructivist-based minimal guidance during the instruction of novice to intermediate learner” (2007, p. 83). Methodology and its effectiveness have also been cited as a serious concern for PBL. The problem arises as teachers do not have the same ability to interpret the curriculum and present it clearly and, further, the differences between student groups can lead to differences in learning (Capon & Kuhn, 2004). Simply put, they believe that the variables of the teacher and/or the design of the work are not consistent enough

to provide proper quantitative data (Capon & Kuhn, 2004). In terms of group work, Capon & Kuhn (2004) further state that there is no evidence to rule out social transmission as the students might already have pre-knowledge of the subject at hand.

## 5. CONCLUSION

The first purpose of this paper was to take an impartial look at problem-based learning and what the empirical evidence says about its effectiveness. As teachers, we strive to give students the best education possible and to accomplish this we require the best possible teaching method. It has been suggested that PBL is one such method; but what does the research say about it?

### 1. What is the empirical evidence regarding the advantages and disadvantages of PBL in the classroom?

Qualitative research shows clearly that students in PBL classes “feel” like they have learned more and are more engaged in the learning process and engagement is a common goal, and serious concern, of all teachers. The majority of the pro-PBL research suggests that weaker students benefit from teamwork and problem solving sessions in mixed ability groups. It is suggested that PBL also increases the students’ in school, problem-solving abilities and practical skills as well as contributing to an overall “positive mood” in both the teachers and students. Lastly, the majority of the pro-PBL research also suggests that this method leads to the gain of life skills which are taken into the professional world such as; planning skills, independent learning skills, independent thinking skills, and reasoning skills.

Contrary to some of the pro-PBL research, con-PBL research shows that this method benefits stronger students who already have a good learning ethic while weaker students find the method challenging. Working in teams and lack of the planning skills required lead to demotivation in weaker students. Further, the con-PBL research denies that the limited quantitative evidence is trustworthy and suggests that the evidence is weak for problem solving and life skills. Lastly, the research suggests that PBL is not suitable for sequential learning subjects, such as engineering, and needs to be adapted to meet the needs of the specific subject. This again refers to rote knowledge rather than problem-solving skills.

### 2. How do factors such as how often is the method used, whole school vs. one class, role of the teacher, assessment, and group size influence the effectiveness of PBL?

This is perhaps the most disputed area when it comes to PBL as an effective method. Although many pro-PBL researchers stand by the method, they do point out that the current class size makes PBL difficult. Current class sizes are too large thus there are too many groups for the tutor to help effectively but with proper implementation PBL can be a benefit to both teachers and students. For PBL to be effective a “whole school” implementation needs to occur which takes resources which many schools do not have. Further, no single, unanimous theory, or definition, for PBL exists which leads to further implementation problems. Moreover, research suggests that it is difficult to assess problem solving skills, interaction or group work. Today’s standardized testing of factual content does not go hand in hand with the “core values” of PBL as self-assessment critical to PBL. The research also suggests that without properly educated teachers, in the PBL method as well as sophisticated group management skills and tutoring skills, the benefits of PBL cannot be achieved. What all of the research does agree on is that the role of the teacher is paramount and that the curriculum has to match the style and goals of PBL. Lastly, there is no body of data to show anything concrete in terms of effectiveness due to the limitations of ethical research.

### 3. Discussion/ professional relevance

This study has focused on the inductive PBL approach as well as its effectiveness. What we discovered is that because we are in a knowledge-based or rote memory school system, the effectiveness of PBL does not coincide with summative assessment. As PBL is a life-long learning skill, summative testing cannot assess the effectiveness of PBL in any quantifiable way. Our way to act, think and communicate is highly influenced by our social experiences and relationships, and through the various discussions we encounter and participate daily we recreate our perception of reality (Säljö, 2000, p. 35). It thus appears to be through the social encounters in our lives that we acquire the most, which is also the idea behind the sociocultural perspective on learning. According to this perspective, learning is a consequence of all human activity which can either occur on an individual or a collective level, such as in classrooms. It is furthermore suggested that our learning experience is highly influenced by our cultural surroundings and how we chose to use the tools provided to us by our surroundings (Säljö, 2000, p. 17f).

## 6. REFERENCES

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#### APPENDIX: Questionnaire items and categories

**Table-1: Questionnaire items and categories**

##### Scale Item

##### Teamwork (T)

- T1. I feel unable to lead a team efficiently.
- T2. I feel that my team-mates see my ideas as irrelevant.
- T3. I find that my team-mates are not cooperative.
- T4. I find it challenging to work with people I don't like.
- T5. I find it difficult to work with people who have different working styles.
- T6. I find it difficult to interact with others.
- T7. I find it hard to work in teams because I prefer to work alone.

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T8. I find that not all my team mates are willing or able to share ideas and/or resources.

**Learning Process (LP)**

LP1. I find it difficult to speak out and share ideas.

LP2. I find it difficult to search for the answers myself.

LP3. I don't know what questions to ask.

LP4. I don't know how to tell whether other teams have correctly addressed the problem.

LP5. I can generate learning issues from the problem statement. (rev)

LP6. I am afraid that I will go off-track.

LP7. I feel that I am learning alot from PBL. (rev)

**Resource Management (RM)**

RM1. I don't know how to find the correct resources to put into the presentation.

RM2. I am unable to understand the information I find from resources.

RM3. When I do research, I don't get the answers I want.

RM4. I find it difficult to find answers to the problem on the internet.

RM5. I am unsure how to learn without books.

**Problems (P)**

P1. I find that the way the problems are phrased makes it difficult to understand.

P2. I feel that the problems are interesting. (rev)

P3. I feel that the problems are very general.

P4. I feel that the problems are not relevant to my daily life.

P5. I find that I am lost in the problems.

**Structure (Struc)**

Struc1. I enjoy going through the same routine everyday. (rev)

Struc2. I find there isn't enough time to do good research.

Struc3. I find there is too much to do in one day.

**Presentations (Pres)**

Pres1. I find it difficult to present my slides confidently to the class.

Pres2. I find it hard for me to explain my presentation clearly.

Pres3. I tend to get stage fright when I present.

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**CHALLENGES OF SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATION FROM SCHOOL TO SOCIETY**

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**ABSTRACT**

*STEM (Science, Technology, Engineering and mathematics) careers are truly 'helping' professions that build communities and transform nations. These professionals are in charge of solving the complex problems of today's world and its future. They are working to find solutions for global warming, cancer, third world hunger, disappearing habitats, and an interdependent world economy. Yesterday's stereotype of the 'geek' in a lab coat is not representative of today's STEM teams, where economists work with researchers on technical transfer and engineers build the state-of-the-art equipment for businesses working with cutting-edge technologies. STEM careers are both challenging and fun-people in them enjoy going to work every day.*

*STEM education presents unique challenges to students and teachers alike. For instance, unlike history or even philosophy, the landscape is constantly changing many areas of expertise in high demand right now didn't even exist 20 years ago. The volatility of the technology powering many STEM disciplines means students and teachers must stay diligent or else let their education become obsolete.*

*Our academic programs in engineering have been the fastest growing majors. We continue to have strong enrolment in biology, chemistry and biochemistry. First, students who select these majors generally enjoy math and science and consider themselves to be above average in these academic disciplines.*

*How students are taught represents a significant part of the work. In the STEM disciplines often changes in pedagogy go hand in hand with greater access to state-of-the-art scientific instruments. Technology, too, in playing an essential role in reshaping the science classroom of the 21st century. More over every election depends on choosing leaders who know how to base decisions on sound economics and now to evaluate statistics. So many local & state referendums depend on both scientific and economic knowledge. Because STEM is so important for our children, our region and our country, we need to encourage the students currently in our educational systems as well as future generations of students to understand and embrace the technology that affects them every day of their lives. Students should be advised on the merits of taking as many math and science courses in middle and high schools as possible and these courses need to be taught by engaged and enthusiastic teachers using hands-on and minds-on activities. Making science and math courses fun and interesting will not only help students to learn, but might also plant the "seed of interest" that could grow into an exciting and rewarding STEM career.*

*Keywords: STEM, cutting-edge technologies, volatility*

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**INTRODUCTION**

Science, Technology, Engineering and Mathematics - STEM, and therefore, STEM Education are vital to our future - the future of our country, the future of our region and the future of our children. Besides, STEM is everywhere, it shapes our everyday experiences

**OBJECTIVE OF STEM EDUCATION (WHAT IS STEM EDUCATION)**

STEM is a curriculum based on the idea of educating students in four specific disciplines - Science, technology, engineering and mathematics - In an interdisciplinary and applied approach rather than teach the four disciplines as separate and discrete subjects. STEM integrates them into a cohesive learning paradigm based on real world applications

**MEANING OF STEM**

- Science is our natural world - sun, moon and stars..... Lands & oceans...weather, natural disasters, the diversity of nature, animals, plants and food. The fuel that heats our homes and power transportation.. The list is almost endless.
  - Technology means computers and Smartphone, TV, Radio, microscopes, telegraph/ telescopes, and even the first wheel.
  - Engineering designs building, roads and bridges, also tackles today's challenges of transportation, global warming and environment friendly machines, appliances and systems.
  - Mathematics, we encounter at the grocery store, the bank on tax forms, in dealing with investments, family Budget etc.
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- Every other STEM field depends on mathematics. STEM is important, because it pervades every aspect of our lives.

### **CHALLENGES FORCED BY UNITED STATE OF AMERICA**

Though the United States has historically been a leader in these fields, fewer students have been focusing on these topics recently. According to the U.S department of Education, only 16% of high school students' are interested in a STEM career and have proven a proficiency in Mathematics. Currently nearly 28% of high school freshmen declare an interest in a STEM related field a department website says but 57% of these students will lose interest by the time they graduate from high school.

### **UNIQUE CHALLENGES DO NEW STUDENTS FACE IN STEM EDUCATION**

STEM disciplines are rapidly evolving, but the way the disciplines are taught is not changing modern science is most active at the interface between disciplines and discovery has become a multidisciplinary activity, where individuals from multiple back grounds with many different perspectives are required to solve complex problems. The most frequent and significant challenges that our students face is their back ground in math and science. Students who have taken advance math., chemistry and physics courses in high school are much more likely to be successful in the gate way course required by the STEM disciplines.

### **CHALLENGES AND STRATEGIES IN UNDAGRADUATE STEM EDUCATION**

Over the past decade researchers have made tremendous strides in their understanding of how people learn. It is now clear that, for most people, learning requires active engagement and that new knowledge is gained through hands on, inquiry based investigations. In addition, learning often is more meaningful when students are able to relate it to their own personal experiences and make lateral connections to other knowledge areas, finally learning is collaborative. It takes place within a community of students and faculty in which everyone is committed to providing a safe place for students to gain confidence and succeed in learning science content and skills (program mirrors learning theory)

Learning begins from the experience, knowledge, interest, and motivation that learners bring to the setting. In addition, learners are active participates in the process. Do engage students, it is important to provide new information that can be used to build upon or challenges their intuitive ideas often the most effective way to do this is by presenting students with real world problems that can be solved using the tools of science.

### **CHALLENGES OF STEM EDUCATION TO THE SOCIETY**

Learning is usually more effective when it occurs within a community, where people can exchange ideas and receive feedback from other interested participants. In this way learning becomes a collaborative process, with participants gaining insights, knowledge and perspectives from the standpoint of their peers.

Work with professional societies to coordinate meeting and workshops and to support the desired changes. The different CCLI (course, curriculum and laboratory improvement) projects are enveloping strategies to realize these goals. In collaboration with science education resource center (SERC)The project has built the website, which includes materials from the workshops, such as teaching activities essays, and Ideas from interactive experiences

### **BLENDED LEARNING**

What separates STEM from the traditional science and math. Education is the blended learning environment and showing students how the scientific method can be applied to everyday life. It teaches students computational thinking and focuses on the real world applications of problem solving, as STEM education begins which students are very young.

(1) Elementary school \_ STEM education focuses on the introductory level STEM courses, as well as awareness of the STEM fields and occupation. This initial step provides standards based structured inquiry based and real world problem based learning connecting of four of the STEM subjects. The goal is to pique students. Interest in to them wanting to pursue the courses not because they have to there is also an emphasis placed on bridging in school and out-of school STEM learning opportunities.

### **STRATEGY FOR STEM EDUCATION**

1. DEVELOPING FACULTY EXPERTISE- Encourage faculty to use teaching strategies that engage students in their own learning. To realize this goal instructor are encouraged to move beyond the lecture format and to experiment with others more engaging methods
2. Assessing and evaluating student achievement. Its purpose is to determine project outcomes and to determine which aspects of a course and program and promoting student learning and which are not.

3. **Critical thinking assessment test (CAT)** The test designed to measure critical thinking skills and the ability to solve real world problems. The purpose is to cultivate a large cadre of faculty members from other institutions who can use and score the test effectively and disseminate it within their regions.
4. **GOVERNMENT SHOULD MAKE EXTRA BUDGET FOR STEM EDUCATION**
5. The **curriculum should be activity based-** models, charts; projects etc. should be used and should be prepared by the students with direct supervision of teachers. The models & projects are also to be interlinked with the need of the daily today life. Besides Science all the others classical & arts subjects are also to be formulated on scientific basis. The slogan science for all should be main Moto. Digital simulation & models should adopt by the teachers to explain concepts and to demonstrate. In a physical class room use of probes and sensors by the students to get real time data and wide range of educational applications like computer due point with a temperature sensor, test PH with a PH probe, chemical changes in photosynthesis using PH & nitrate sensors. More efficient Assessment should be done through multiple choices, to know the concept clearance of the students. Teachers should ask children to learn through multimedia projects, so that the students excited to create something that their peers will see in addition teachers team work and makes sense to incorporate a component of technology that has become so integral to the world outside of the classroom. The teacher should also tell story to create interest on subjects. The students should be encouraged to use E-books & E-library to increase potential for innovating education. Epistemic games should be played by the students under direct supervision of the teachers to develop their mind to solve the real world problems. Use of social media in a positive way is also helpful to their creativity and efficiency.
6. **Creating a sport nation** – sport possesses the intrinsic value to respond the basic human desire for physical movement & to generate feelings of satisfaction, pleasure and joy retaining mental & physical health. The science behind good health & good physic promoting mental health should aware to the child.
7. **Technological based science study.** - The traditional science in curriculum has no use in day to day life, lacking scientific attitude among students. The science law, theory taught in class room must be activity based. Different projects, models and simple handmade machines should prepare by the students under active guidance of the teachers after teaching each topic (using the law and theory). It will increases interest among students. The social media like face book, whatsapp, YouTube should be used as reference.

## CONCLUSION

Course, curriculum and laboratory improvement (CCLI) is fostering model programs that can be replicated at institutions nationwide. It is soliciting proposals from the higher education community encouraging faculty members to stretch their thinking to develop the most effective student centered approached to teaching & learning. The ultimate goal is to transform the higher education system. So that all students graduating from college are scientifically literate prepared to debate the complex and challenging issues of our time. For those students who choose to become scientists, their experiences in college should prepare them for the highly competitive workplace of the 21<sup>st</sup> century.

## AKNOWLEDGEMENT

Inspite of taking so many steps to develop the STEM education female students are significantly less likely to pursue a college major or career, the gap is increasing at a significant rate. Overall male students are three times more likely to be interested in pursuing a STEM career in the other hand, Asian student have historically displayed the highest level of interest in STEM fields.

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**LINEAR STABILITY OF NON-COLLINEAR LIBRATION POINTS IN THE GENERALIZED PHOTO-GRAVITATIONAL CR3BP UNDER STOKES DRAG EFFECT**

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**ABSTRACT**

*This study focus on the effect of Stokes drag on the non-collinear libration points in the generalized photogravitational restricted three-body problem, by considering the oblateness of less massive primary and the radiating primary as more massive primary. It is found that there exist two non-collinear unstable libration points in linear sense. This is due to Stokes drag for all the values of mass parameter  $\mu \in (0, 1/2)$ . The research has its own significance based on the recent researches conducted by many researchers in the present days. The main theme of this research is to observe the effect of Stokes drag on non-collinear libration points in the Sun-Earth Planetary (SEP) system.*

*Keywords: PR3BP, Libration points, Linear stability, Stokes drag.*

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**1. INTRODUCTION**

Stokes drag is the non-gravitational force acting on a moving particle that happens due to the collision among the molecules present in the gas. If a particle is moving around a star in the galaxy then Stokes drag describes the dissipative force acting on the particle. It is assumed that the motion of gas is circular around the barycenter and its angular velocity is slightly less than the Keplerian velocity by a factor  $\alpha$ . Considering all these facts, Murray and Dermott (1999) described this force as Stokes dissipative force and its components along the axes are given as  $-k(\dot{x} + y + \alpha \Omega_y)$  and  $-k(\dot{y} + x - \alpha \Omega_x)$  respectively, where  $k$  is dissipative constant ( $0 < k < 1$ ),  $\Omega$  is Keplerian velocity defined as  $\Omega(r) = r^{-3/2}$  and  $\alpha$  is the ratio between gas and Keplerian velocity. They have studied its effect on the libration points  $L_4$  and  $L_5$  in circular restricted three-body problem and found that these libration points become unstable due to Stokes drag. It is found that for  $\alpha = 0$ , the given Stokes dissipative components reduces to linear drag *i.e.*  $-k(\dot{x} + y)$  and  $-k(\dot{y} + x)$ . Thus linear drag is a particular case of Stokes drag.

The importance of this research on Stokes or PR-drags can be experienced by us based on many researchers who had contributed much in the past few decades. An analytical approach to linearized the stability of non-collinear libration points is provided by Murray (1994). Liou et.al. (1995) have performed a numerical analysis of 1:1 resonance, taking into account the effect of inclination and eccentricity along with dissipative force. Giordano et.al. (1996) studied the linear drag effect on the existence and stability of equilibrium points obtained in Robe's restricted three-body problem. The studies conducted by Ishwar and Kushvah (2006) shows the effect of PR-drag on the triangular libration points considering the smaller primary as an oblate body and bigger one as a source of radiation. Their study showed that the triangular libration points are unstable because of PR-drag. The work carried out by Kushvah (2009) on the PR-drag effect on the stability of libration points in linear sense in the generalized photogravitational Chermnykh's problem. In his research, the smaller primary is an oblate spheroid and bigger primary is a source of radiation. He has found that the libration points are unstable for the mass of the belt  $M_b \geq 0.4$ . Celletti et.al. (2011) performed a dynamical analysis of the planar circular restricted three-body problem taking into account three types of dissipation *i.e.* linear, Stokes and PR-drag. They have found the periodic orbit attractors in the case of linear and Stokes drags, but in PR-drag no other attractors have been found except the primaries. Singh and Amuda (2015) have studied the out-of-plane equilibrium points in photo-gravitational restricted three body problem considered the oblateness of bigger primary and PR-drag, and found that there exist two out-of-plane equilibrium points namely  $L_{6,7}$  which are unstable in linear sense. Idrisi et.al. (2016) have shown the effect of Stokes drag on libration points assuming the smaller primary as a triaxial rigid body and found that there exist two non-collinear libration points which are linearly unstable. More recently, Singh and Amuda (2017) carried out their study that shows the PR-drag effect on non-collinear libration points in restricted three-body problem when both primaries are oblate as well as radiating and also found that the non-collinear libration points are affected by radiation pressure, oblateness and PR-drag. In this case these non-collinear libration points are also linearly unstable.

In this research work, we are planning to investigate the effect of Stokes drag and oblateness of smaller primary on the existence and stability of non-collinear libration points considering a planar-circular photogravitational

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restricted three-body problem. This study aims to discuss the existence and stability of non-collinear libration points in SEP system under Stokes drag effect.

**2. EQUATIONS OF MOTION**

Let  $m_i$  ( $i = 1, 2, 3$ ) be the masses of more massive primary, less massive primary and infinitesimal mass respectively and  $m_1$  is a source of radiation while  $m_2$  is an oblate body ( $a = b > c$ ). The forces acting on  $m_3$  due to  $m_1$  and  $m_2$  are  $F_1(1 - p)$  and  $F_2$  respectively, where  $F_1, F_2$  are the gravitational forces due to the primaries  $m_1$  and  $m_2$ ,  $p = F_p / F_1$  ( $0 < p < 1$ ),  $F_p$  is radiation repulsive force on  $m_3$  due to  $m_1$ . The equations of motion of the infinitesimal mass in the orbital plane *i.e.*  $z = 0$  in the framework of restricted three body problem in synodic coordinate system are:

$$\left. \begin{aligned} -2ny + kx &= U_x + ky\rho, \\ +2nx + ky &= U_y - kx\rho. \end{aligned} \right\} \tag{1}$$

where

$$U_x = n^2x - (1 - \mu) \frac{(x - \mu)(1 - p)}{r_1^3} - \mu \frac{(x + 1 - \mu)}{r_2^3} \left( 1 + \frac{3\sigma}{2r_2^2} \right), U_y = y \left[ n^2 - \frac{(1 - \mu)(1 - p)}{r_1^3} - \frac{\mu}{r_2^3} \left( 1 + \frac{3\sigma}{2r_2^2} \right) \right],$$

$$0 < \mu = \frac{m_2}{m_1 + m_2} < \frac{1}{2} \Rightarrow m_1 = 1 - \mu; m_2 = \mu, \rho = 1 + \frac{3}{2}\alpha r^{-7/2},$$

$n^2 = 1 + 3\sigma/2$  is the angular velocity of synodic frame,

$\sigma$  is oblateness factor due to  $m_2$ ,

$$r_1^2 = (x - \mu)^2 + y^2, r_2^2 = (x + 1 - \mu)^2 + y^2, \tag{2}$$

$k$  is dissipative constant ( $0 < k < 1$ ),  $\alpha$  is the ratio between the gas and Keplerian velocities,  $k \in (0, 1)$  and  $\alpha \in (0, 1)$ . The Stokes drag effect is of the order of  $k = 10^{-5}$  and  $\alpha = 0.05$ .

**3. NON-COLLINEAR LIBRATION POINTS**

At the libration points the velocity and acceleration components of the infinitesimal mass becomes zero, therefore Eqns. (1) take the form

$$n^2x - \frac{(1 - \mu)(x - \mu)(1 - p)}{r_1^3} - \frac{\mu(x + 1 - \mu)}{r_2^3} \left( 1 + \frac{3\sigma}{2r_2^2} \right) + k y \left( 1 + \frac{3\alpha}{2r^{7/2}} \right) = 0 \tag{3}$$

and

$$y \left[ n^2 - \frac{(1 - \mu)(1 - p)}{r_1^3} - \frac{\mu}{r_2^3} \left( 1 + \frac{3\sigma}{2r_2^2} \right) \right] - k x \left( 1 + \frac{3\alpha}{2r^{7/2}} \right) = 0. \tag{4}$$

The non-collinear libration points are the solution of Eqns. (3) and (4),  $y \neq 0$ . In the absence of Stokes drag *i.e.*  $k = 0$ ,  $r_1 = (1 - p)^{1/3}n^{-2/3}$  and  $r_2 = 1$  is the solution of Eqns. (3) and (4). Let us assume the solution of above said equations for  $k \neq 0$  as  $r_1 = (1 - p)^{1/3}n^{-2/3} + \xi_1$  and  $r_2 = 1 + \xi_2$ ,  $\xi_i \ll 1$  ( $i = 1, 2$ ). Using these relations in Eqns. (2), we have

$$\left. \begin{aligned} x &= \mu - \frac{1}{2} + \frac{p}{3} + \frac{\sigma}{2} + \xi_2 - \xi_1 \\ y &= \pm \frac{\sqrt{3}}{2} \left[ 1 + \frac{2}{3} \left( -\frac{p}{3} - \frac{\sigma}{2} + \xi_2 + \xi_1 \right) \right] \end{aligned} \right\} \tag{5}$$

Now, using (5) in Eqns. (3) and (4) and neglecting higher order terms in  $k$ , we then get

$$\xi_1 = \frac{k}{\sqrt{3}} \left[ \frac{1}{3} + \frac{2\mu}{3} + \frac{\alpha}{2} \right],$$

$$\xi_2 = \frac{k}{\sqrt{3}} \left[ \frac{1}{3} \left( 1 - \frac{2}{\mu} \right) - \left( \frac{5}{4} + \frac{1}{\mu} \right) \alpha \right].$$

Thus, the non-collinear libration points  $L_{4,5}(x, \pm y)$  so obtained are

$$x = \mu - \frac{1}{2} + \frac{p}{3} + \frac{\sigma}{2} - \frac{k}{\sqrt{3}} \left[ \frac{2}{3\mu} + \left( \frac{7}{4} + \frac{1}{\mu} \right) \alpha \right], \tag{6}$$

$$y = \frac{\sqrt{3}}{2} \left[ 1 - \frac{2}{3} \left\{ \frac{p}{3} + \frac{\sigma}{2} + \frac{k}{\sqrt{3}} \left( \frac{2(1-\mu)}{3\mu} + \left( \frac{3}{4} + \frac{1}{\mu} \right) \alpha \right) \right\} \right]. \tag{7}$$

Eqns. (6) and (7) represent the abscissa and ordinate of non-collinear libration points  $L_{4,5}$  respectively, affected by Stokes drag, radiation pressure as well as oblateness of the primary  $m_2$ . From Eqns. (6) and (7), following three results can be easily verified as: (i) neglecting the Stokes drag effect, the obtained results are agreed with Sharma (1987), (ii) neglecting the Stokes drag as well as oblateness effect, the results are in conformity with Bhatnagar and Chawla (1979), and (iii) considering only the mass parameter effect, the results are in agreement with Szebehely (1967).

As  $p$  increases, the abscissa ( $x$ -coordinate) of  $L_{4,5}$  also increases while ordinate ( $y$ -coordinate) of  $L_{4,5}$  decreases (Table 1). Thus as  $p$  increases, the non-collinear libration point  $L_4$  move toward the  $y$ -axis along the straight line  $l$  and the scalene triangle formed by  $L_4$  from the primaries reduces (Fig. 1). A clear effect of Stokes drag and oblateness on  $L_4$  is shown in Fig. 2 (location of  $L_4$  in presence of stokes drag and oblateness is shown by red color while in absence of Stokes drag and oblateness it is shown by blue color and green color shows only the Stokes drag effect without oblateness) and it is concluded that the non-collinear libration points are affected by Stokes drag, oblateness and radiation pressure as well.

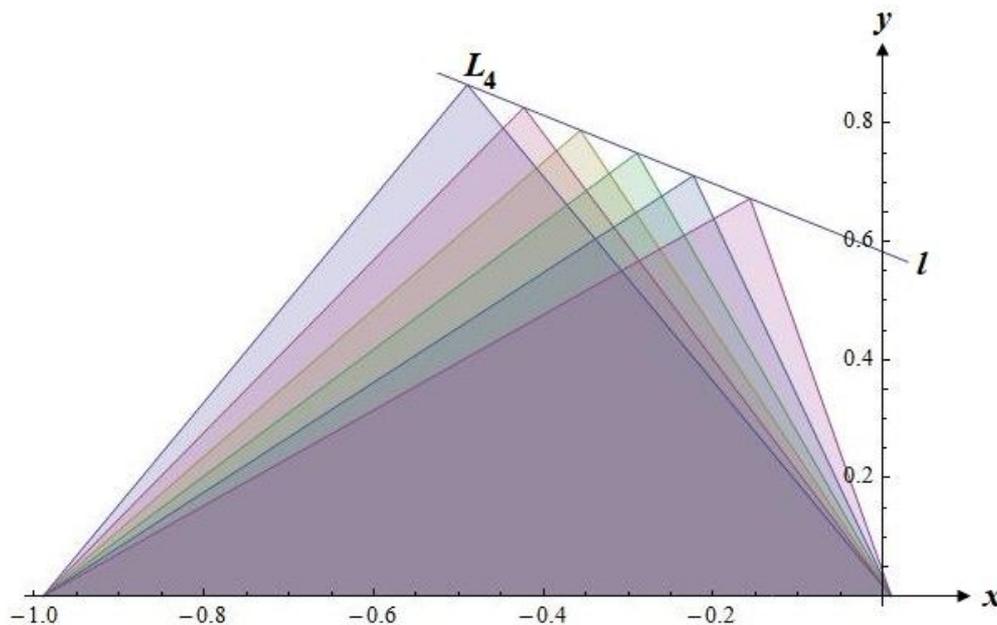


Fig-1:  $L_4$  in  $0 < p < 1$ ;  $\mu = 0.01, k = 10^{-5}, \alpha = 0.05, \sigma = 10^{-3}$

Table-1: Location of  $L_{4,5}(x, \pm y)$ ;  $\mu = 0.01, \alpha = 0.05$

$p$	$\sigma=0, k=0$		$\sigma=0, k=10^{-5}$		$\sigma=10^{-3}, k=10^{-5}$	
	$x$	$\pm y$	$x$	$\pm y$	$x$	$\pm y$
0.0	-0.490001	0.866025	-0.490414	0.865789	-0.489914	0.865501
0.1	-0.456667	0.846781	-0.457081	0.846544	-0.456581	0.846255
0.2	-0.423333	0.827535	-0.423748	0.827299	-0.423248	0.827011
0.3	-0.390001	0.808291	-0.390414	0.808054	-0.389914	0.807765
0.4	-0.356667	0.789045	-0.357081	0.788809	-0.356581	0.788521
0.5	-0.323333	0.769801	-0.323748	0.769564	-0.323248	0.769275
0.6	-0.290001	0.750555	-0.290414	0.750319	-0.289914	0.75003
0.7	-0.256667	0.731311	-0.257081	0.731074	-0.256581	0.730785
0.8	-0.223333	0.712065	-0.223748	0.711829	-0.223248	0.711541
0.9	-0.190001	0.692821	-0.190414	0.692584	-0.189914	0.692295
0.99	-0.160001	0.675501	-0.160414	0.675263	-0.159914	0.674974

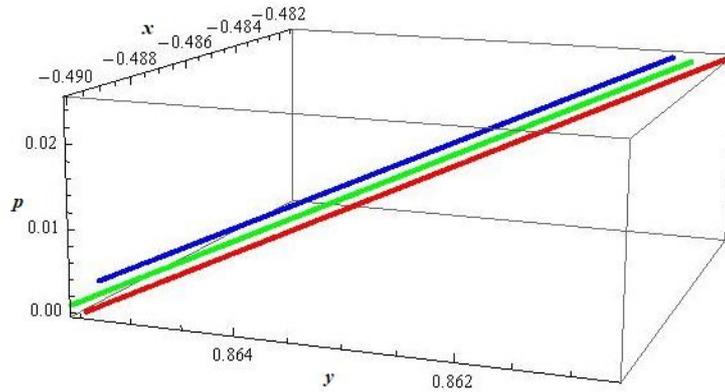


Fig-2:  $L_4$  in  $0 < p < 1$ ;  $\mu = 0.01$  and  $\alpha = 0.05$  (blue:  $\sigma=0, k = 0$ ; green:  $\sigma=0, k = 10^{-5}$ ; red:  $\sigma=10^{-3}, k = 10^{-5}$ )

**4. STABILITY OF LIBRATION POINTS**

The equations of the motion of the infinitesimal mass can be written as

$$\left. \begin{aligned} \ddot{x} + 2n\dot{x} + kx &= U_x + \kappa_x, \\ \ddot{y} + 2n\dot{y} + ky &= U_y + \kappa_y, \end{aligned} \right\} \tag{8}$$

where  $\kappa_x = k\gamma\rho$  and  $\kappa_y = -kx\rho$ .

Let  $(\zeta, \eta)$  be the small displacement to the libration point  $(x^*, y^*)$  i.e.  $x = x^* + \zeta, y = y^* + \eta$  and considering only linear terms in  $\zeta$  and  $\eta$ . The perturbed Eqns. (8) in terms of  $\zeta$  and  $\eta$  can be written as:

$$\left. \begin{aligned} \ddot{\zeta} + 2n\dot{\zeta} + k\zeta &= U_x(x^* + \zeta, y^* + \eta) + \kappa_x(x^* + \zeta, y^* + \eta) = \zeta U_{xx}^* + \eta U_{xy}^* + \zeta \kappa_{xx}^* + \eta \kappa_{xy}^*, \\ \ddot{\eta} + 2n\dot{\eta} + k\eta &= U_y(x^* + \zeta, y^* + \eta) + \kappa_y(x^* + \zeta, y^* + \eta) = \zeta U_{yx}^* + \eta U_{yy}^* + \zeta \kappa_{yx}^* + \eta \kappa_{yy}^*. \end{aligned} \right\} \tag{9}$$

The characteristic equation of the Eqns. (9) is given by  $f(\lambda) = 0$  i.e.

$$f(\lambda) = \lambda^4 + p_1\lambda^3 + p_2\lambda^2 + p_3\lambda + p_4 = 0, \tag{10}$$

where

$$\begin{aligned} p_1 &= 2k, \\ p_2 &= 4n^2 + k^2 - U_{xx}^* - U_{yy}^* - \kappa_{xx}^* - \kappa_{yy}^*, \\ p_3 &= 2n(\kappa_{xy}^* - \kappa_{yx}^*) - k(U_{xx}^* + U_{yy}^* + \kappa_{xx}^* + \kappa_{yy}^*), \\ p_4 &= U_{xx}^* U_{yy}^* + \kappa_{xx}^* \kappa_{yy}^* + \kappa_{xx}^* U_{yy}^* + \kappa_{yy}^* U_{xx}^* - (U_{xy}^*)^2 - \kappa_{yx}^* \kappa_{xy}^* - U_{xy}^* (\kappa_{xy}^* + \kappa_{yx}^*), \end{aligned}$$

$$\kappa_{xx}^* = \frac{-21}{4} k \alpha x^* y^* (x^{*2} + y^{*2})^{-\frac{11}{4}},$$

$$\kappa_{yy}^* = \frac{21}{4} k \alpha x^* y^* (x^{*2} + y^{*2})^{-\frac{11}{4}}$$

$$\kappa_{xy}^* = k \left( 1 + \frac{3}{2} \alpha (x^{*2} + y^{*2})^{-\frac{7}{4}} - \frac{21}{4} \alpha y^{*2} (x^{*2} + y^{*2})^{-\frac{11}{4}} \right),$$

$$\kappa_{yx}^* = -k \left( 1 + \frac{3}{2} \alpha (x^{*2} + y^{*2})^{-\frac{7}{4}} + \frac{21}{4} \alpha x^{*2} (x^{*2} + y^{*2})^{-\frac{11}{4}} \right),$$

$$U_{xx}^* = n^2 - \frac{(1-\mu)(1-p)}{r_1^3} \left( 1 - \frac{3(x^* - \mu)^2}{r_1^2} \right) - \frac{\mu}{r_2^3} \left( 1 - \frac{3(x^* + 1 - \mu)^2}{r_2^2} \right) - \frac{3\mu\sigma}{2r_2^5} \left( 1 - \frac{5(x^* + 1 - \mu)^2}{r_2^2} \right),$$

$$U_{xy}^* = \frac{3(1-\mu)(1-p)(x^* - \mu)y^*}{r_1'^5} + \frac{3\mu(x^* + 1 - \mu)y^*}{r_2'^5} + \frac{15\mu(x^* + 1 - \mu)y^* \sigma}{2r_2'^7},$$

$$U_{yy}^* = n^2 - \frac{(1-\mu)(1-p)}{r_1'^3} - \frac{\mu}{r_2'^3} \left( 1 + \frac{3\sigma}{2r_2'^2} \right) + y^* \left[ \frac{3(1-\mu)(1-p)y^*}{r_1'^5} + \frac{3\mu y^*}{r_2'^5} - \frac{15\mu y^* \sigma}{2r_2'^7} \right],$$

$$r_1'^2 = (x^* - \mu)^2 + y^{*2},$$

$$r_2'^2 = (x^* + 1 - \mu)^2 + y^{*2}.$$

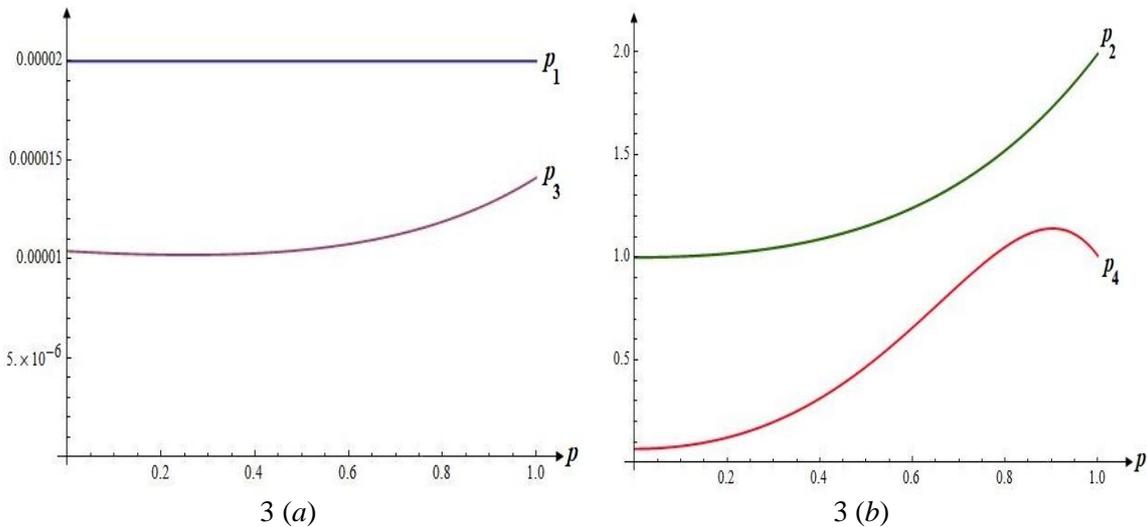


Fig-3(a):  $p_{1,3}$  versus  $p$ ; Fig. 3(b):  $p_{2,4}$  versus  $p$

**Table-2: Stability of  $L_{4,5}(x, \pm y)$**

$p$	$\mu = 0.01, \alpha = 0.05, k = 10^{-5}$					
	$p_1$	$p_2$	$p_3$	$p_4$	$\lambda_{1,2}$	$\lambda_{3,4}$
0.1	0.00002	1.00541	0.0000101595	0.0796738	$-5.06331 \times 10^{-6} \pm 0.294492 i$	$-4.93669 \times 10^{-6} \pm 0.958483 i$
0.2	0.00002	1.01958	0.0000100749	0.121458	$-5.08124 \times 10^{-6} \pm 0.939067 i$	$-4.91876 \times 10^{-6} \pm 0.371121 i$
0.3	0.00002	1.04652	0.0000100465	0.197479	$-5.37886 \times 10^{-6} \pm 0.89416 i$	$-4.62114 \times 10^{-6} \pm 0.496987 i$
0.4	0.00002	1.08964	0.0000100912	0.312456	$-0.0841341 \pm 0.742901 i$	$0.08412417 \pm 0.742898 i$
0.5	0.00002	1.15315	0.0000102302	0.467875	$-0.231782 \pm 0.793911 i$	$0.231772 \pm 0.793909 i$
0.6	0.00002	1.24213	0.0000104914	0.658487	$-0.308555 \pm 0.846328 i$	$0.308545 \pm 0.846326 i$
0.7	0.00002	1.36278	0.0000109107	0.86659	$-0.353217 \pm 0.897859 i$	$0.353207 \pm 0.897857 i$
0.8	0.00002	1.52246	0.0000115358	1.05307	$-0.363984 \pm 0.945365 i$	$0.363974 \pm 0.945362 i$
0.9	0.00002	1.72985	0.0000124291	1.14394	$-0.319872 \pm 0.983485 i$	$0.319862 \pm 0.983481 i$
0.99	0.00002	1.99487	0.0000136738	1.01101	$-0.135747 \pm 1.00058 i$	$0.135737 \pm 1.00057 i$

The stability of libration point  $(x^*, y^*)$  depends upon the nature of roots of the characteristic Eqn.  $f(\lambda) = 0$ . If all four roots  $(\lambda_i, i = 1, 2, 3, 4)$  of  $f(\lambda) = 0$  are pure imaginary, then  $(x^*, y^*)$  will be stable. As shown in the Fig. 3 (a) and (b), all  $p_i > 0$  ( $i = 1, 2, 3, 4$ ) for  $\mu = 0.01, \sigma = 10^{-3}, k = 10^{-5}$  and  $\alpha = 0.05$  in  $0 < p < 1$ . Therefore, by Descartes' sign rule, the roots of the characteristic Eqn.  $f(\lambda) = 0$  are complex i.e.  $\lambda_{1,2} = a_1 \pm ib_1$  and  $\lambda_{3,4} = c_1 \pm id_1$  and hence the non-collinear libration points  $L_{4,5}$  are unstable (Table 2).

5. APPLICATION TO SEP SYSTEM

As a real application of this study to the planetary system concern, we consider the less massive primary as the Earth and more massive primary as the Sun. Therefore, in dimensionless SEP system:  $\mu = 0.00000300346$ ;  $a = 0.0000426352$ ;  $c = 0.0000424923$ ,  $\omega = 1.000000000018248$  and  $\sigma = 2.43294 \times 10^{-12}$ . The non-collinear libration point  $L_4$  in SEP system from the Eqns. (6) and (7) is plotted and shown in the Fig. 5 and 6.

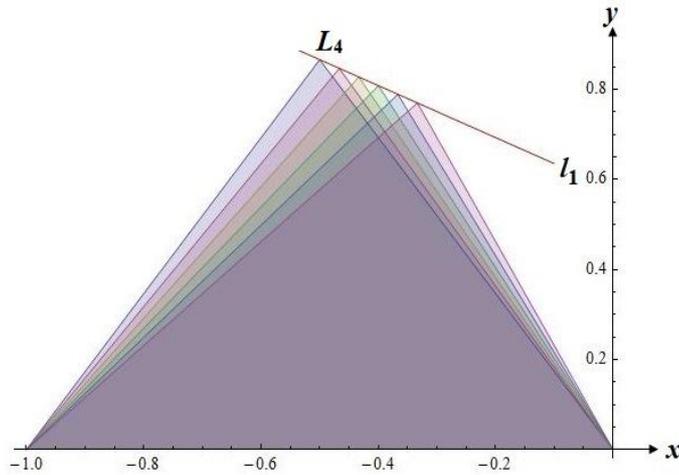


Fig-4 (a):  $L_4$  in SEP System for  $k = 0$  in  $0 < p < 1$

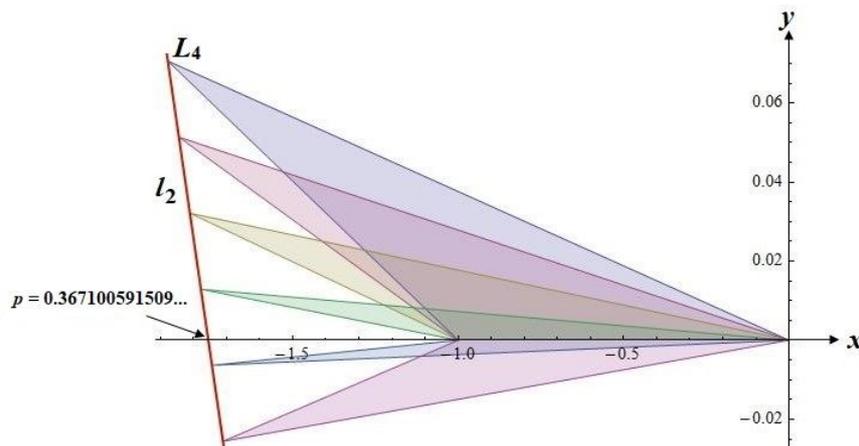


Fig-4 (b):  $L_4$  in SEP System for  $k = 10^{-5}$  and  $\alpha = 0.05$  in  $0 < p < 1$

From the Figs. 4 (a) and (b), it is observed that in the absence of Stokes drag, the non-collinear libration point  $L_4$  moves toward  $y$ -axis along the straight line  $l_1$  as  $p$  increases (Fig. 4 (a)). In the presence of Stokes drag the non-collinear libration point  $L_4$  moves downward along the straight line  $l_2$  as  $p$  increases (Fig. 4 (b)) and for  $p = 0.367100591509\dots$ , the point  $L_4 (-1.7552674065\dots, 0)$  lies on  $x$ -axis *i.e.* we have a collinear libration point for  $p = 0.367100591509\dots$  in SEP system due to Stokes drag effect. The results in SEP system are remarkable.

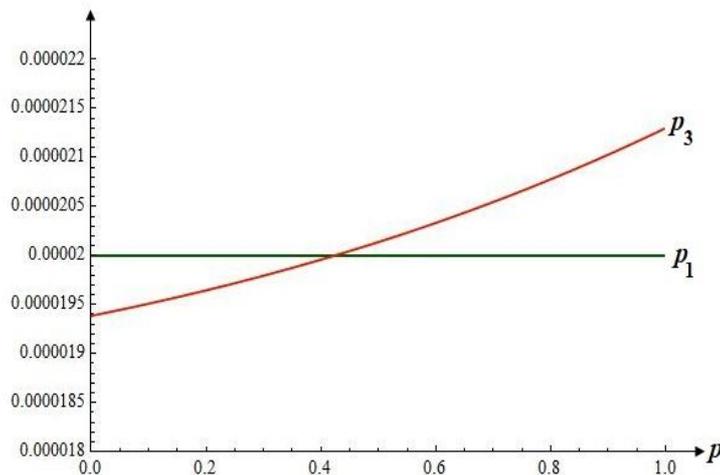


Fig-6 (a):  $p_{1,3}$  in SEP system for  $k = 10^{-5}$ ,  $\alpha = 0.05$  in  $0 < p < 1$

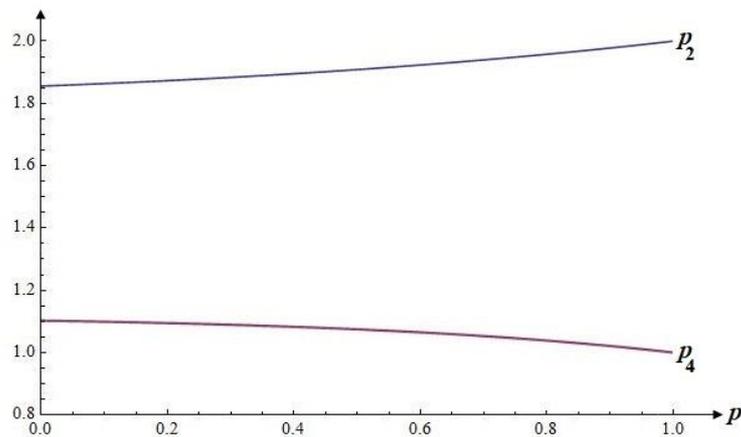


Fig-6 (b):  $p_{2,4}$  in SEP system for  $k = 10^{-5}$ ,  $\alpha = 0.05$  in  $0 < p < 1$

Now, to discuss the stability of the libration point  $L_4$  we have plotted the  $p_i$ -curves and found that all  $p_i > 0$  ( $i = 1, 2, 3, 4$ ) in the interval  $0 < p < 1$  (Fig. 6 (a) and (b)). Thus, using Descartes' sign rule, the roots of the characteristic equation  $f(\lambda) = 0$  are complex *i.e.*  $\lambda_{1,2} = a_1 \pm ib_1$  and  $\lambda_{3,4} = c_1 \pm id_1$  and hence the non-collinear libration point  $L_4$  in SEP system is unstable. Similarly,  $L_5$  is also unstable.

## 6. CONCLUSION

In this study it is discussed about a planar circular photogravitational restricted three body problem and the effect of Stokes drag and oblateness on the infinitesimal mass  $m_3$ . It is found that, as  $p$  increases, the non-collinear libration point  $L_4$  move toward the  $y$ -axis along the straight line  $l$  and the scalene triangle formed by  $L_4$  from the primaries reduces (Fig. 2). The libration point  $(x^*, y^*)$  is said to be stable if the characteristic Eqn. (10) has all negative real roots or pure imaginary. As shown in the Fig. 3 (a) and (b), it is observed that all  $p_i > 0$  ( $i = 1, 2, 3, 4$ ) for  $\mu = 0.01$ ,  $k = 10^{-5}$  and  $\alpha = 0.05$  in  $0 \leq p \leq 1$ . Therefore, we can come to a conclusion that by Descartes' sign rule, the roots of the characteristic equation  $f(\lambda) = 0$  are complex *i.e.*  $\lambda_{1,2} = a \pm ib$  and  $\lambda_{3,4} = c \pm id$  and hence the non-collinear libration points  $L_{4,5}$  are unstable (Table 2). Finally, we consider a real application in the Sun-Earth system and found that in the absence of Stokes drag effect the non-collinear libration point  $L_4$  moves toward  $y$ -axis along the line  $l_1$  as  $p$  increases (Fig. 4 (a)). We finally conclude that in the presence of Stokes drag effect the non-collinear libration point  $L_4$  moves downward along the line  $l_2$  as  $p$  increases (Fig. 4(b)) and for  $p = 0.367100591509\dots$ , the point  $L_4 (-1.7552674065\dots, 0)$  lies on  $x$ -axis. Thus we have a collinear libration point for  $p = 0.367100591509\dots$ , in SEP system due to Stokes drag effect and the non-collinear libration point  $L_4$  in the Sun-Earth system is unstable in linear sense.

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**CHINESE SMARTPHONE BRANDS RULING INDIAN MARKET**

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**ABSTRACT**

*To buy a high involvement product with a label of being a Chinese brand was definitely not a great buy for Indian consumer's couple of years back, be it any category. Due to rapid globalization which led to price war and the need to communicate effectively Smartphone as a product category has now become immensely competitive where consumers are continuously looking towards value for money. India as of today has around 650 million mobile phone users which includes almost 300-400 million Smartphone users, which shall witness 530 million Smartphone users by end of 2018. The highest number of Smartphone users this year could be seen in China which is a whopping 1.3 billion and has already started to penetrate Indian market and also are highly successful in drawing consumer's attention. With globalization of Smartphone brands, Indian market is where the Chinese smart phone manufacturers perform at their best as half of the 124 million smart phones sold in India during 2017 were Chinese brands successful in generating 53% of Smartphone sales in India.*

*Chinese brands being saturated in domestic market in terms of sustainable growth are now entering into global market, India being the most promising one having huge potential for growth. Currently India is witnessing a "Chinese Smartphone revolution" as it witnessed NOKIA revolution in early 2000s. The growing acceptance of brands which are not only coming with compelling features but also with a pricing strategy that is attracting and dominating the price-conscious Indian market. Brand loyalty towards Smart phone has also come at stake as Indian consumers have begun to accept foreign brands which are providing offerings and are trying hard to create customer delight. With a span of less than five years, Chinese smart phone makers have not only managed to capture Indian market but have also been highly successful in changing the Indian consumer perception towards Chinese brands in general. The paper basically discusses the growth, adoption, and marketing strategies of Chinese Smartphone brands to ensure uninterrupted growth globally.*

*Keywords: Smartphone, Globalization, Chinese firms, Mobile technology, Price sensitivity, Strategy.*

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**INTRODUCTION**

The mobile phone users in India is on the rise, recently India surpassed USA to become second largest mobile phone user after china. The Indian smart phone market not only stands second but also underlined as the most promising market in future as well. According to data issued by department of telecom, India has 1.17 billion mobile phone users (Tele density in urban center has crossed 168%, rural center have 56.66% a lot of scope indeed). In this upsurge, mobile users' smart phone users are dominating the market. As Indian mobile phone users are getting younger and more techno savvy, smart phones are becoming more and more consumed and becoming preferred choice of the Indian mobile phone user as compared to feature phone.

The recent figures tabled by IDC, the Indian smart phone market has seen a rise of 14% with total 124 million units produced which tells the story in nutshell that how this segment of mobile handset has seen drastically changing in such a shortest span of time. Domestic as well foreign manufactures are being at the center of the stage right now; especially Chinese brands are scripting a historic story of success and achievement in Indian markets. Recently Gionee the Chinese heavy weight has entered into the market with a different approach and selling proposition which secured quite a huge wave of sales and market share for its India centric smart phone devises. In all 53% of market share is captured by Chinese firms in India, it tells the story of Chinese unprecedented success in Indian cell phone market which used to be dominated by giant Nokia.

How these companies are attracting a larger portion of consumer towards them and how they are keeping a positive growth oriented trajectory? This can be summed up in two arguments; the weakening host country's competition and huge pool of resources to tap unserved/ underserved markets of Indian cities. The way Chinese brands are utilizing unconventional selling approaches coupled with E-retailing hysteria is worth praising. The Jio wave has also helped the market to get to the great length and depth like never before but now the Jio wave is completely taken over by Chinese stalwarts, which also replaced South Korean biggy Samsung. Despite of high numbers of smart phone sales in India, the country remains a focal point of companies as the penetration of smart phones in country is still very low, which helps in making the market attractive enough in near future as well. Pricing and affordability remains a great drive for the future and present products in market, which needed to be addressed properly by these competing forces. Report tabled by IDC and the Ericsson Mobility says that mobile subscriptions in India are expected to rise to 1.4 billion by 2021 which roughly covers the

entire population of country. Such huge market needs extra care and attention on details by manufactures; otherwise today’s leading brands may become obsolete in future.

**INDUSTRY PROFILE**

As the market of smart phone has started to grow, the composition of market has also shifted from domestic players to foreign players. India is such a market which has proved to be a great play ground for foreign firms, particularly Chinese companies. These companies have become largely successful in attracting a lion’s share in India because of their inherent strength and innate experience of dealing with domestic customers. Since these companies are doing well in their domestic front, it makes them perfectly equipped for Indian market, which is steadily growing. Their research and development, deep pockets and practical understanding of customer needs and wants have placed these firms at the top. The smart phone market has seen a lot of breakthrough selling and customer appeasing strategies lately. The industry has grown majestically in last 3 years in looks very promising in years to come as well. The market share of smart phones is given in the below table which is compiled by IDC for Q1 2018 (Units sold).

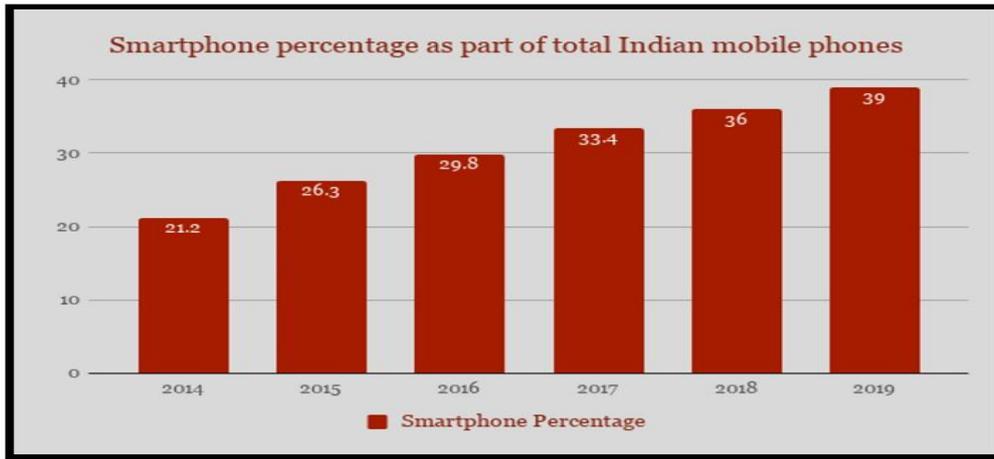
The market presently dominated by Xiaomi with whopping 30.3% market share of smart phone units sold. Samsung, once the leader in smart phones segment (market leader in 2017) is on number two with little over 25% market share. Other Chinese brands such as OPPO, VIVO and Transsion have grabbed more than 18% of total market share (48% market share is currently controlled by Chinese firms). The Indian owned firms are performing well in feature phone segment (Jio is leading the growth) but when it comes to smart phone market, Indian companies are struggling to get into pockets of customers. End of the day, according to above data it is about Chinese invasion of Indian smart phone market. Not only the entry segment of smart phones is being dictated by Chinese firms, it’s the story of the premium segment too. Premium (\$600 plus) segment has seen a strong and decisive growth as it registered an YoY growth of 68% due to the roll out of Samsung’s iconic Galaxy S9. In the \$ 400 to \$600 segment, One Plus (Chinese brand) led the market with 50% market share. So in a way, Chinese firms are leading not only entry segment of smart phones but have grabbed premium segment too.



**Top Five Smartphone and Feature Phone Companies in India, Market Share (Units), 2018Q1**

Smartphone, 2018Q1		Feature Phone, 2018Q1	
Company	Market Share	Company	Market Share
Xiaomi	30.3%	Reliance Industries	38.4%
Samsung	25.1%	Samsung	10.4%
OPPO	7.4%	Transsion	7.9%
vivo	6.7%	Lava	6.0%
Transsion	4.6%	Micromax	4.7%
Others	25.9%	Others	32.6%

Source: IDC Quarterly Mobile Phone Tracker, May 11, 2018



Source: IDC Quarterly Mobile Phone Tracker

**THE SMART PHONE GROWTH STORY**

Although Indian market is typically known for its feature phone oriented mindset, but the smart phone market and their penetration is taking its place in market now. The smart phone market is getting deeper and wider with the passage of time. The demography of India also supports the usage and consumption of high speed internet and a supporting devise, which is a smart phone.

The table above shows the growth saga of smart phones in India and the picture is quite clear. Once the market so niche has become a huge to ignore. In year 2014 the total contribution of smart phones in total mobile handset market was 21.2% which has reached to 39% in 2019, which is 18% growth in just a short span of 5 years. Overall the segment looks very tempting and rewarding at the same time. One more factors which makes it very unique is, there is no sign of sluggish growth or negative trajectory in near future as more and more consumers are getting to know the usability and coming into influence of Information technology’s diffusion.

Indian Smartphone market showed an 8% growth to 29.5 million units for the quarter. In Q1 2018 the performance of Chinese brands accounted for 57% of total Smartphone market which was an obvious increase from 53% in Q1 2017. As far as the feature phone segment , Reliance Jio was ahead as the market share grew up to 36% in Q1 2018( Exhibit 1& 2).

Exhibit 1: India Smartphone Market Share – Q1 2018

India Smartphone Shipment Market Share (%)	Q1 2017	Q1 2018
XIAOMI	13.1%	31.1%
SAMSUNG	25.9%	26.2%
VIVO	11.9%	5.8%
OPPO	9.9%	5.6%
HONOR (HUAWEI)	1.4%	3.4%
OTHERS	37.8%	27.9%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Source: Counterpoint Research Market Monitor Q1 2018

Exhibit 2: India Feature Phone Market Share – Q1 2018

India Featurephone Shipment Market Share (%)	Q1 2017	Q1 2018
RELIANCE JIO	0.0%	35.8%
SAMSUNG	25.4%	9.8%
ITEL	15.9%	9.4%
NOKIA	0.0%	7.3%
LAVA	9.1%	5.6%
OTHERS	49.6%	32.1%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Source: Counterpoint Research Market Monitor Q1 2018

**REASONS BEHIND POPULARITY OF CHINESE BRANDS**

**Hyper localization-** The Chinese brands which are doing extremely good as compared to Indian brands and other foreign brands in smart phone segment are an extreme example of hyper localization. All the features and specifications of smart phones by these giants are localized. This strategy of being in touch with local demands with international appeal has proved to be beneficial for these brands and has propelled these brands ahead in India markets.

**Cost effective strategies-** The overall reason for their success can be summarized in this point of cost effectiveness. Since India customer is highly price sensitive and these brands have kept this factor in mind very consciously. The Chinese brands are usually fully loaded with up to date features, specifications, yet the pricing of these handsets are very low as compared to Indian as well as other foreign brands. All the leading Chinese brands are an example of cost effectiveness in India which has put them ahead in race against other contemporary brands of smart phones.

**Brand awareness and goodwill-** Brand awareness and goodwill of these brands have reached to its pinnacle now, but this has happened very slowly and steadily. These days' markets and consumers alike are very well familiar and aware towards these smart phone brands. This has helped these companies to perform well in foreign markets. Brand ambassadors, excessive advertisement and promotion (sponsoring national cricket team of India and largest sporting event in Indian, IPL) are some steps which helped in gaining popularity among India users.

**Distribution channel's network-** These brands have noticed and addressed a very crucial issue in Indian smart phone market which is distribution. A product regardless how wonderful it is, shall remain useless until it reaches its final customers. Chinese brands learnt this stark lesson from its predecessor NOKIA. Most of the success of these brands can be contributed to their online and offline distribution channel. Easy, early, sure availability has helped Chinese brands to cement their position in Indian markets.

**Huge market potential-** India is a huge market with very low smart phone penetration (unlike china). This huge gap between supply and demand makes these brands hugely popular due to their intense distribution and low pricing. If these two factors are going to remain so, these brands shall keep on flourishing.

**Local production/assembly-** All major brands including Xiaomi have set up their assembly/ manufacturing units in India to make their product more price sensitive and to reduce delivery gap. This has helped them in becoming more and more competitive with rest of the product which are primarily dependent on China for their parts/components and remain uncompetitive in terms of pricing. This localization of production has also helped them in obtaining government aids too in accordance to make in India initiative.

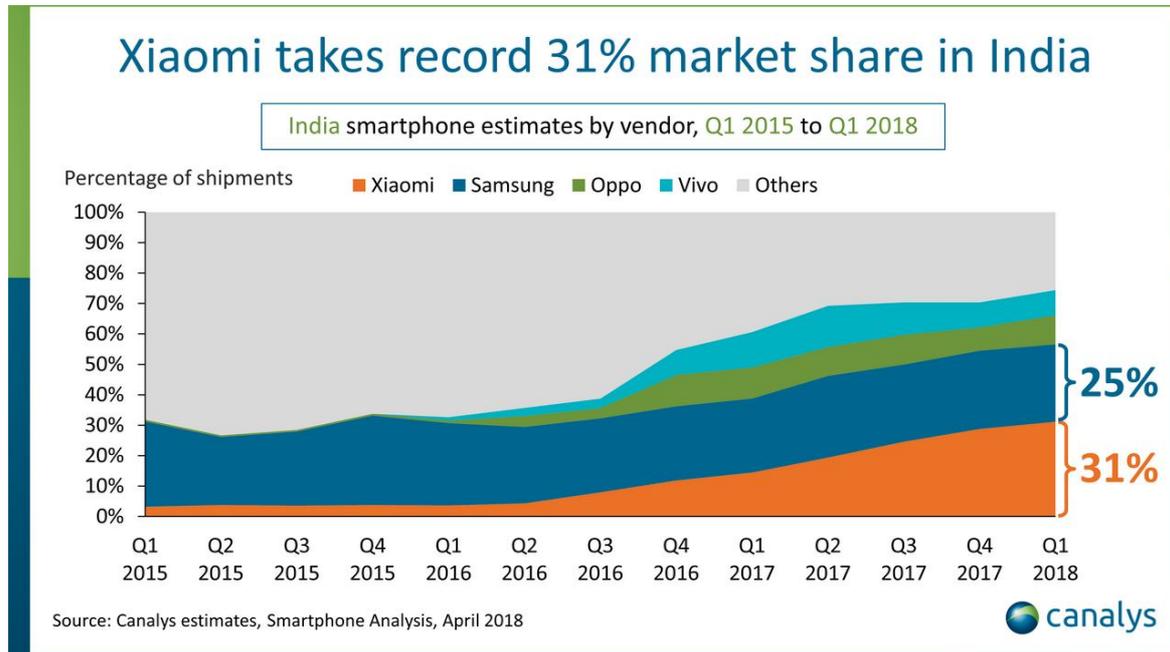
All these steps have proven to be important in the growth of Chinese brands in India. With the passage of time and change in customer perception, these brands would face a staunch competition from other international brands but if these brands to sustain in the market, they must maintain their competitive market.

**INVASION OF CHINESE PLAYERS IN INDIAN SMARTPHONE MARKET**

One of the most competitive markets in India is that of Smartphone's with both international and local brands trying hard to capture this profit making industry. Indian Smartphone manufacturers have been hit hard as China has completely taken charge of the Indian market with their innovative offerings and marketing strategies. Chinese players have far better technological efficiencies which makes them deliver superior quality products not only in Indian markets but worldwide (As per Ind-Ra). This international player works with a long term strategic objective to satisfy the needs of Indian consumers through Brand- building and setting up of manufacturing plants in Indian market.

Chinese brands like Vivo, Oppo, Xiaomi, One plus and Honor are the strong ones which are dominating Indian Smartphone market. (As per reports by IDC and Counterpoint). Xiaomi has beaten the south Korean giant Samsung in second quarter 2018 due to its strong product and supply chain strategy, thereby creating a greater demand in Indian market. Market share of brands like Oppo and Vivo occupy third and fourth place in Indian Smartphone market. As per the reports by Counterpoint launching new products, aggressive campaign around IPL 2018 and making use of celebrity endorsements led to increased shipments of Vivo. Oppo, during the quarter was also able to create a strong online presence by giving value for money to Indian consumers. In 2Q18 Honor another Chinese brand was able to hold second position by claiming 8 % share in online segment by offering variants across price segments. One plus which is doing wonders in Indian market outperformed both apple and Samsung by controlling 40 % market share (Counterpoint report).

Apart from being highly successful in marketing their products Chinese players very cleverly identified the growth potential of Indian market and making huge investments with India-Centric research and developmental centers along with having corporate headquarters in India.



#### SMARTPHONE ANALYSIS AS PER APRIL 2018. IMAGE: CANALYS

In the first quarter of 2018 Chinese Smartphone maker Xiaomi saw gigantic 155 % annual shipment growth with over 31 % market share followed by Samsung occupying 25%. With 2.8 million shipments Oppo was third and finally Vivo ranked fourth with 2.1 million shipments as reported by Canalis.

#### MARKETING STRATEGIES OF CHINESE MANUFACTURERS

Adapting to Indian market has been one of the key concerns of Chinese players where they very smoothly adjusted their logistics to the local trade policies which is very well visible by participating in “Make in India” program which has a prime motive to not only assemble but even manufacture products in India. This move has even enabled in job creation to an extent that not almost 70% of handsets purchased in India are locally manufactured. Also these players have anticipated the needs of Indian consumers also extremely well. Let’s have a look at some of the strategic moves taken by Chinese Smartphone makers which had contributed their huge success in Indian market.

- ✓ **Affordable Innovative products:** New product innovations have been the core of Chinese Smartphone brands that too within the budget of consumers. Apart from this they have offered brands by catering to different segments and making tailor made phones to suit different consumer personas. With this strategy they had overcome the challenge of less brand loyalty amid consumers. Chinese brands have been able to rise ahead of the competition by enhancing features such as designing selfie cameras and also selling it as a selfie camera phone. With an in-display fingerprint sensor Chinese phone maker Vivo V11 Pro is the latest Smartphone edition in Indian market priced at 25,990 all set to be made available to consumers.
- ✓ **Product availability shifting to even offline stores from e commerce platform:** - Initially Indian consumer could own a Chinese smart phone brand only through e commerce platforms like Amazon, Snapdeal and Flipkart. After a careful observation and research firms realized the consumer buying behaviour of Indians and came up with conclusions that most Indians prefer to buy phones through an offline retail outlet as reported by Convergence Catalyst. With a dual channel strategy brands have now have a better understanding on Indian consumer mind set and have understood the market growth potential beyond Tier-1 and Tier-2 Indian cities. Owned by same parent organization BBK Electronics Oppo and Vivo are now seen highly successful which are sold at offline stores in Indian market. OnePlus along with these brands have made Indians expend cash on high-end flagship phones, thereby overcoming the biggest challenge faced by Chinese manufacturers regarding the Indian mindset towards Chinese products. OnePlus used a unique strategy of allowing Air Asia and Ola customers to experience the phone by making a request.

- ✓ **Quality products at low prices:** - Chinese players have experimenting a lot with pricing strategies and have been able to provide high-quality products at affordable prices to Indian consumers. Thereby creating an image of value for money Chinese Smartphone brands have not only penetrated Indian market but has created a whole lot of satisfied consumer base ready to spend a premium price also for brands like One Plus which are in direct competition with Samsung and Apple in terms of providing quality products.
- ✓ **Creating a situation of scarcity through Flash sales:** Another very interesting strategy used is the Chinese smart phone players never sell their products freely. Due to limited availability and time consumers are highly excited and motivated to be the first buyers on the spot Xiaomi makes use of flash sales extremely well and always creates curiosity, leading to urge of owning the brand as soon as possible.
- ✓ **Celebrity endorsers:** Popular Indian celebrity stars have been signed to promote both Oppo and Vivo. Aamir Khan is a brand endorser for Vivo and the brand is also leveraging its presence through event sponsorships by being the official sponsor of Indian Premier League (IPL). Oppo also managed to gain the brand visibility by being their brand name printed on Indian national team t-shirts. Big B Amitabh Bachchan, Vikas Khanna (chef), Vir Das (comedian) and Sushant Singh Rajput were some of the stars who were been selected from different fields by OnePlus to promote the brand so as to appeal to the masses.
- ✓ **Aggressive Outdoor Promotions:** Banners and hoardings are one of the most prominent ways of advertising being used by both vivo and oppo. Due to their availability now through offline stores this strategy is creating a huge impact due to visibility.



Source <https://www.marketingmind.in/oppo-vivo-ruling-indian-offline-smartphone-market/>

**High margins to retailer:** Availability is the most important factor in determining brand success and getting a right product at right time is what marketers always strive for. Oppo and Vivo have been able to pay huge profit margins to retailers which in turn motivate them to keep a substantial stock and ensure they meet customer needs well on time. As compared to other brands vivo and oppo as Chinese Smartphone brands make their intermediary partner retailers extremely contented by giving them 14-16% of margin.

**Influencer Approach and word of mouth marketing :** One of the most unique and engaging way to make a brand stand out is roping in influencers as was seen in the case of one plus when brand made Suresh Raina, Mouni Roy, BeYouNick, and Anita Hassanadani pose with the new variant launch and this created a buzz in the market. Also the brand built an online forum for tech savvy enthusiasts where they could stay connected and could sort their queries instantly. One plus also used a strategy where it began selling its phones to only those customers who received a company invite, thereby giving one plus users also share invites with their friends. A collaborative activity with Disney known as Avenger Infinity War was one of the most exciting strategy to engage with their target customers where brand launched its OnePlus 6 limited edition Marvel Avengers Infinity war phones.

### THE ROAD AHEAD!!

Indian consumer is not only more judicious and demanding but has also evolved over time. Chinese brands would be capitalizing the untapped aspirational India by offering value for money. With their deep insight into customer segmentation has helped Chinese brands to create a loyalty base in Indian market and country is now becoming the next Chinese market. Brands like Xiaomi, Oppo, Vivo and One plus to name some most powerful brands have been able to strongly influence the Millennial generation in India with products having latest design, specifications and most importantly with a price tag which is very much affordable. Understanding consumer needs with customized offerings has been the success mantra of these brands as compared to homegrown brands that did not bother enough to invest in product innovations and coping up with environmental changes and market development.

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**ADOPTING EMERGING TECHNOLOGIES IN TEACHING AND LEARNING ENGLISH**

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**ABSTRACT**

*English has become a universal language of communication. It has been recorded as the fastest spreading language in the world exerting wide influence on the world community. The use of technology in the field of teaching and learning English has increased manifold in recent years. Reaching to the masses, it proved a great value addition in teaching and learning language and literature. Teachers can inculcate high thinking skills and cater the literary taste of their students with the help of such technological tools – multimedia animated movies, cartoons, film adaptations, PowerPoint and interactive white board, radio, TV, CD Rom, Computers, Internet, C.A.L.L., the Internet, Electronic Dictionary, Email, Blogs and audio Cassettes can be used effectively in the teaching learning process. Now teachers have a technological tool in their hands, which they may use to teach their students in language building, motivating them to read literature and to constructively uplift their life by learning and adopting the rules and conduct of social life.*

*This study aims to find out the positive impact of technology which brought revolution in the lives of teachers and learners by making learning effective and accessible to all and translating dreams into reality.*

*Keywords: Universal Language, Interactive White Board, Multimedia Technology, Language Building, Film Adaptation.*

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**INTRODUCTION**

The position of English as a second language in India, enjoys a high reputation as an effective medium of spreading knowledge as well of curriculum. English is a language which is having a vast scope and exerts wide influence on its learners. Undoubtedly English is, now a universal language and the best medium of communication in both the academic world as well as in the world of professionals. At present English is in its peak of glory and progress as the strength and number of English learners are increasing day by day. With the rapid increase in the number of English learners, various innovative methods have been incorporated to enhance the effectiveness of the methodology of teaching and learning English. Recently, with the help of advance technology, English language teaching and learning have become more easier and effective. By incorporating technology in their teaching methodology, teachers are providing great help in improving the basic skills of the students and also catering their taste towards the positive development of high thinking skills. By inculcating higher thinking skills in the learners, teachers are promoting them towards the critical thinking analysis as well as inspiring them towards problem solving attitude. Technology provides us powerful learning tools which includes, the very effective multimedia and virtual learning environment, for the students community to learn this language.

**TECHNOLOGY**

The use of technology in the form of PowerPoint and interactive white board has become a centre of attraction for the students in classroom. The use of technological tools in the form of films, radio, TV has been there for a long time, providing great help in the successful replacement of the traditional method of teaching. Stepping in the new era we are confronted with new challenges and the responsibilities on the modern teacher has increased a lot. With the help of these technological tools teachers are making their profession very lucrative, throbbing with new knowledge and innovative ideas which has resulted into more productive, in terms of improvements, helping to carve a new picture of teaching and learning.

Technology is one of the most important source of social as well as linguistic change. The words of Graddol: (1997:16) in this respect is worth noting, when he says that "technology lies at the heart of the globalization process; affecting education work and culture. The use of English language has increased rapidly after 1960. At present the role and status of English is that it is the language of social context, political, sociocultural, business, education, industries, media, library, communication across borders, and key subject in curriculum and language of imparting education".

**EMERGING NEW TECHNOLOGY**

Emerging new technology is meant to throw light on the incorporation of new digital computerized, network information and communication technologies in the field of education. New media encompasses: online news, streaming videos and streaming audio, websites, 3-D and virtual reality environments and effects, presentation and computing capabilities, CD and DVD media, telephone and digital data integration, online communities,

live internet broadcasting, print media includes all newspaper, magazines, books, paper pamphlets, radio and television, telegraphs are included in broadcast media. The use of new technology opens up educational opportunities and with the help of these tools the immediate targets of effective learning, leading to a better future can be achieved. This paper tries to explore the use and effects of new emerging technologies in teaching and learning English language and also investigates how useful and specific is the new emerging technology which is also an innovative method that inspires the learners to go through the various experiences, using all divergent expertise. These emerging technologies that can be used in English language teaching methodology with an influential communicational approach. Because of the huge strength of English learners in India, different teaching methods have been adopted to check their effectiveness on the teaching methodology. One of them is the use of multimedia in English Language Teaching, to enhance the literary effects of the context taken. This helps students to get involved and learn according to their interests, It has been tested effectively and is widely accepted for teaching English in the modern world. The use of multimedia technology such as films, videos, and computers in order to achieve the educational objectives has become a powerful medium for effective teaching. The traditional way of teaching is the teacher oriented teaching.

Leaving behind the 'chalk and talk' method the film, the visual text has proved more effective. The suitability of film as a teaching tool lies in the fact that it is there in the present generation's daily life, and attract audio visual learners.

The multimedia have motivating effect, and is grounded on the students' appeal towards it and the utilisation of films and other modes of teaching therefore, results into a more enjoyable learning process appropriate to their preferences.

Teaching through Films and videos provide rich store houses of information about daily life, dress patterns, transportation and complex cultural elements such as values, attitudes, social activities.

Teaching through films, animation and video and audio clips are great facilitator in comprehending text. Comprehension here means-

- Comprehending the literal meaning of the context taken.
- Integration of information and ideas of a writer with the reader's information and related experiences.
- The use of movies, for textual exploration, is relevant and comprehensible. The visual text has been proved a great success.
- The silver screen adds dimension to learning by making it lucid and easy to understand and by deepening students' understanding of literature as an independent art form.

The use of technology is a boon for the upliftment of modern styles and needs as it attracts not only the visual but also the auditory senses of the learners. The usage of English around the world, is wide spread. According to David Graddol 'it is the language at the leading edge of scientific and technological development, new thinking in economics and management, new literatures and entertainment genre..... David Graddol, (The future of English, Page 2)

The present century is an age of globalization and the transnational distance has been mitigated through the Internet. The rapid surge in English learning is due to the fact that nearabout 80% of information provided through the internet is in English language. This growth in the Non-Native rather than Native users of English displays the different age, nationality, learning background etc, which become a unique feature of ELT today. With the fast growth in the field of science and technology, the application of audio, visual and animation effects for teaching English sets a favorable platform to explore on English teaching in the present era. Technological innovations are also helping in bringing about a new change in the ways of communication. The growth of the internet has given a new orientation to the development of the English language and computers and digital literacy has become accessible to all. This has helped in the proliferation of literature with the intervening of technology in teaching and learning English language.

Teachers can use Multimedia Technology for making their lectures lively, colourful and lucrative expanding its horizons. There are many techniques applicable and useful in the field of distance education, in teaching business English, spoken English, reading, listening or interpreting. The teaching methodology should appreciate new technologies and functions which provide useful and new ways of teaching. It disseminates so easily that its attraction and influence can not be overlooked.

The multitools of technology offers huge knowledge compared to the textbooks, and helps the learners to know the rich cultural heritage of the western culture through various channels and motivates them for the active participation in class discussion and communication.

Multimedia teachings enables the students to have speaking communication. The effective use of multi-media sound lab, helps a lot in promoting the individualized and co-operative teaching and creates comparatively more visual, authentic and vivid ambience for English learners, enhancing their communicative competence.

With the advent of computer technology our teaching learning process has now taken a new form of computer assisted English language learning and teaching. Students now, have a wide range of equipments which has made learning process lucid and easy to understand.

By using various modes like- authentic videos, presentations, slides, net, Face Book, and Twitter, Educational Web-Sites and also through some innovative and interesting software programmed lessons, they can learn English in a very effective and interesting way. Software extends great help to the students to enhance their knowledge of foreign languages with lots of fun, zest and enthusiasm.

Teachers can make their students understand the basic grammatical rules of English from the store of exercises available on the Internet. These grammar rules, different types of exercises and vocabulary present on the Internet are of great help to them. The exercises related to the tenses, prepositions, part of speech, conjunctions, verbs, adverbs, adjectives and exclamations etc. provide great help to them, making them feel free to incorporate their own ideas and finding the assessment about their scores as well as make them practice hard for the best results.

To make improvements in the communication skills, learners of English Language can take the help of on line dictionaries and pronouncing dictionaries. All Electronic Media and mobiles are having the option of dictionary and the learners can easily get the meaning of a particular word, with their antonyms & synonyms.

For the enhancement of Interactive skills like making presentations in the class rooms these technological tools provide great help. While conversing in English language or any other language physical appearance, body language or facial expressions plays an important role. By making presentations on facial expressions, the verbal and nonverbal communications skills can be enhanced, which are very helpful during interviews and on other occasions. Grammatical subjects and language based exercises can be made easy and interesting through presentations, helping in creating a pleasant & conducive educational ambience.

In circulating study materials and assignment to their students Internet technology helps a lot to the teachers. In the field of Research also collaborations with electronic Arts have given joint products, bringing a significant change by making learning lucid, supple and comfortable.

Traditional classes have taken a new form of smart, innovative, digital classrooms, encouraging thousands of learners and teachers to use multimedia and new emerging technological equipments effectively.

Presentday classrooms are well equipped with LCD and overhead projectors making learning happen through familiar visuals like- slides, video clips, demonstration and the own recording of the students. Through the global arena software the pronunciation of the students can be improved a lot, where a learner has to type some words in the exercise and pronounce it as well as record them in his/her own voice with the help of the particular software, then after listening to the correct pronunciation of that word the student can compare both the pronunciations and can find the correct pronunciation with the help of the new technology. This software programme is very useful in finding the flaws and correcting them effectively.

### **TEACHING THROUGH SOFTWARE PROGRAMMED**

Teachers can teach their students through various interesting software programmed based lessons, which includes language games, video clips, audio exercises and different other interesting features. Language software Programmes are equipped with various user friendly features, showing user's status by providing correct answers with their explanations and catering their needs of the from the beginner's level to the very advanced form. English language teaching through PowerPoint presentations are also very interesting and easy to understand.

In this global world E-library and E-Journals have given new life and orientation in the field of research helping the research scholars to get more and more material and information in the subject concerned. Internet is proving a boon the modern learning environment. A large number of English language learning websites are present on Internet providing great help to the learners to expand their horizons of knowledge and information. Blogs, Internet, E-mail, Face book, Twitter are other various modes of enhancing language skill that can be effectively used by the English language teachers. Blogs and own domain Websites can be used to post chapters and other materials related to sample lessons & examinations papers, grammar, literature and communications skills. Students can be inspired and motivated to use these material to increase their knowledge and skill.

There are various techniques which teachers can use to develop different smart testing tools to teach the learners and sharp their language skills, making them learn the grammatical rules with the help of these testing tools. The various English language exercises present on the Internet can be used for practicing grammar and vocabulary and the immediate feedback facility provides the students lots of chances to improve their language skills.

As we all know that excess of anything is bad, so is the case with technology also. While providing huge help in English language teaching, we can not deny its negative aspect also. The dependency on the computer based educational tools makes the learners sit on one place for a long period of time and lessens their amount of active participation in any drill or discussion. Technology has proved very beneficial for long-distance communication, but on the other hand it has decreased our skill of social communication and face to face encounters. The extensive use of technology hampers the imaginative thinking of the students, making them dependent on the ready-made study material available on the internet. Learning should be broad and objective and students should be promoted for observing, analyzing and exploring.

### **CONCLUSION**

Students are not capable to understand and the beauty of complex and abstract thoughts due to their habit to using short and incomplete sentences to save time and hard work, which has resulted into the distortion of the language example:

You are -u r

B cos - because

cmb - Call me back

msg - Message, xtnt - Excellent, mth - month and so many other examples. Traditional method of teaching binds the teacher-taught relationship very strongly. The presence of a teacher holds the whole class like a family and nurtures the saplings very tenderly, preparing the future generation who will be developed into the global community and will be equipped with proper language skills. In this modern world the job and responsibilities of a teacher has increased a lot as they are supposed not only teaching the proper language skills, using the modern technological equipments but also has to minimize its negative effects on the learners, making their students learn the right skills.

To conclude, we hope that the learners of English language will be facilitated by the rapid growth in technology and with the use of multimedia English teaching will be developed. The methodology of teaching and learning English will be modified, will be more learner-oriented and less sedantic, leading to the development of communicative competence in the learners.

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**ROLE OF COMMUNAL INTELLIGENCE IN VOCATION**

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**ABSTRACT**

*Social media business has become an acceptable business strategy in today's times. At a point of time when social media was opening up its wings it used to be considered not more than as the only entertainer for kids and young generation. Over the time the skeptics who believed this about social media were proved wrong as the businesses started putting themselves on the websites to gain more popularity and wide reach and the best part being the cost effectiveness of the media, business houses over time began to see it as an opportunity much so that its popularity gained momentum and the social media websites such as Facebook, Instagram, Twitter, Snapshot flourished and took over the share of print media. It is considered that online ad, posts, photos see a great popularity, observes better reach, and the messages can be tailored according to the targeted audience as per the analysis. According to the studies social networking occupies the largest share of time, buoyed by the increase in mobile internet consumption, as 61% of mobile time is spent on social media consumption. The paper discusses about the potentials of the platform and the strategies of the business houses setting new milestones with the passing time which makes it extremely compulsory for any profession to establish a walking talking identity on the internet to have a personalized relationship addressing all types of concerns of its people.*

*Keywords: Social media business, websites, social networking*

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**EVOLUTION OF THE ROLE OF SOCIAL MEDIA IN BUSINESS**

Social Media are computer mediated tools that helps a community to build, contribute, or exchange information, career interest, ideas and pictures/videos in virtual communities and network. Social media is nothing but a group of internet-based applications that were build on an imagination of initially pioneering a "read-only web" i.e Web 1.0 era where the specifically designed websites exist allowing the flow of communication from a single source only a one way traffic. This age was known as information age of dotcom boom before 1999. But as the times progressed people got smarter and it wasn't difficult for the people to realise that websites can also help e-commerce. The applications helped upload their products to potential customers through advertising their catalogues, promotions and prospectus in an e- format. This was the time when retailers had arrived and launched themselves on a websites. The challenge at this juncture was when the feedback could not be retrieved, the mechanism was lacking. Such realization gave birth to Web 2.0 & the year 1999 marked the beginning of read-write and publish era which was believed to be three dimensional where active exchange of ideas, opinions took place when clients, prospects or public at large became the in charge of overall participatory and interactive system. This real time sharing platform allowed exchange of information, content creation, participation of thoughts, opinions and advocacy along with evaluation of feedback and prompt action intandemly moving suitably to this day and age. The rise of the science in form of Facebook and Amazon.com has contributed dramatically changing the landscape of the web. It has even more potential than we have yet to see. The Web 2.0 appears to be a welcome move to the multiple users of the web whether the users who can have anything on the mere click of the button be it the feedback, response, rating of the product and its analysis or the product itself of any segment which is available on the web as per the convenience of the consumer even in terms of deliverytime as well as mode of payment. The second party or the users of web are the business houses who have been able to leverage from the social media realizing that strengths of the media available where data is considered as a core to the relationships on the platform. The diversity of the web makes use of different forms of data available whether it is data of people, government, enterprise, weather or any current condition or topic which is raw in nature and can be made use by the interested parties for their own vocation to derive its use and benefit to themselves or society at large.

According to Statististica, there are about 2.46 billion social network users worldwide in 2017 and rising multifold. As per the studies the time devoted by each person over social media properties (Face book, Messenger, Instagram, and WhatsApp) occupying their smartphone time is a massive 21.8% according to studies conducted by US Adult users of each platform 2014-19 . Overall, Facebook-owned properties comprised more time measurement than any other media platform.

In comparison amongst all the social media, Facebook is much more acceptable to the audience in terms of average monthly minutes per visitor, even among Millennial (18-34). Even youth (12-24) – who find snapchat as interesting as well as Facebook have confessed that still Facebook remains their first choice that they have used more often. as per a recent report.

Unlike Snapchat, which observed almost half (46.8%) of its adult visitors in from 18-24-year-olds whereas Facebook visitors were evenly distributed across different age groups, with 25-34-year-olds the largest group (20.3% share) along with different age groups with still wider appeal.

The study mentions that communications functions are becoming more important with the rise of mobile, and a recent study from GfK similarly showed that communications activities are at the heart of mobile usage. Those of us who deny the fact and abstain from using social media for the promotion shall have to go out of the businesses in no time. As per the reports it wouldn't be wrong to deduce the internet penetration has spread like wild fire for the purpose of customer acquisition in this day and age.

The communication activities are spread across different media's as per the comScore report Multimedia attributes to 12%, Radio (8%) and portals (6%) are leading in the content categories with the contribution of gaming industry being 5% which also occupies sizable share in consumer's digital media time. The amount of time spent by the people as per the analysis is constantly on the rise. Young generation is more averse to spending nine hours per day on an average on the social media platform while 30% of the total time is being captured alone by the social media interaction in the category in the online segment. The mobile also observes 60% of the time going into the social media kitty facilitated by the mobile devices.

The social media platforms have begun to develop and evolve their own tools and options to further attract and involve new audiences (e.g. advent of live-streaming features and 360-degree photos/videos). The new emerging social platforms, including Snapchat, Instagram, and now Musical.ly, are also competing for their market share. Subsequently, brands are diving deep into social media with social media ad spend expected to reach its new heights. The Facebook's growing popularity and dominance of digital is already well-known; this year it will account for 23.0% total US digital ad spending. But it will also hit a new height in 2018, taking in \$1 of every \$10 spent on all advertising—digital and nondigital combined.

To take a closer focus upon the social media penetration by the business houses, Facebook's US ad revenues (forecast by eMarketer to reach \$21.57 billion this year) will be twice the amount spent on newspaper advertising (\$10.74 billion) and nearly as much as advertisers will spend on the entire print category (\$23.12 billion). In 2019 Facebook will zoom ahead, accounting for 11.3% of all US ad spending, compared with 10.0% for print.

To give marketers a better understanding of the social media landscape, we analysed the time spent across all the social media platforms available, projected what it means within a consumer's lifetime, and compared these figures against common daily activities and examples of what can be accomplished with an equivalent amount of time (e.g. walk the Great Wall of China 3.5x, and run 10K+ marathons).

Surprisingly, the average person spends nearly two hours (approximately 116 minutes) on social media everyday, which construes to a total of 5 years and 4 months spent over a lifetime. Moreover, time spent on social is only expected to increase as platforms develop, and is expected to eat further into traditional media - most notably TV. Right now, the average person will spend 7 years and 8 months watching TV in a lifetime. However, as digital media consumption continues to grow at unbelievable rates, this number is expected to shrink in counter to that expansion.

Apparently as per the metrics, total time spent on social media surpasses time spent eating and drinking, socializing, and grooming. On segregating, time spent on social media vary across each platform. YouTube comes in first, consuming over 40 minutes of a person's day (i.e. 1 year and 10 months in a lifetime). Facebook users will spend an average of 35 minutes a day, totalling 1 year and 7 months in a lifetime (some statistics include Facebook, Facebook-owned Instagram, and Facebook Messenger for total time spent on Facebook). Snapchat and Instagram come in next with 25 minutes and 15 minutes spent per day, respectively. Finally, users will spend 1 minute on Twitter, spanning 18 days of usage in a lifetime.

### **REALITY OF SOCIAL MEDIA PLATFORM**

The social media platform helps entrepreneurs and network designers consider therefore resource available for content creation and market acquisition, giving residual needs and prospects high hopes. Its unbelievable but true, that the online content works 24\*7,365 days in a year and 7 days a week even when we are sleeping or awake its impact and influence never stopsday in and day out as once we hit publish and it goes on www. It works for us forever like fishing mine in the ocean. As we create multiple fishing mines it will only add to the business and spin more profit. Apparently, matter of concern is the right food on the fishing hooks as the quality of food always matters and must serve the purpose for the clients. It is harsh reality that the audience least care about the product, service or business on offer rather they are

more selfish about their need fulfillment which in reality they ought to be selfish after all it is this requirement only that sets the ball rolling and serves a prime business for many of us. The social media platforms are capable in knowing about the needs, likings, taste, indulgences and demographics, moreover the statistics of frequency of visiting the website, analysis of average time given and mostly when at the time of the day, the data comes in form graphs and patterns reading the minds of different age groups, demographics, etc which helps benefit any product, service or business. Therefore there is immense data resources and market situational analysis available about the available population which can be capitalized upon placing the law of reciprocity at its finest to make a transaction hugely beneficial since the analysis give away the data about lookalike audiences based upon reading the interest patterns of the population furthering the details of all demographics integrated in readymade form of market segmentation.

In such situation it depends upon us to provide the clients with the unique proposition of just what they need, as a salesperson it doesn't appear as difficult to get money out of someone's pocket when they are provided with what they wished and browsed and without them even realizing internet was fast enough to catch their wishes and do the needful prompt enough. The content available has to be eye-catching and interest matching as there is only one thumb rule that "you have to give before you receive" whether its your proposition, content or end product, being a marketer we have to keep the focus upon positioning our brand and building its name. Its considered best when we get people talking about it, the likes, comments, shares attract more and more audiences. More the likes, shares, comments, the more the popularity. In recent times things, products or people become viral in no time when especially they have a hugely famous or infamous or controversial content or when they have a huge influencing figure/s endorsing the product who have the huge capability to drive the traffic towards their product or unlike the traditional direct advertisements in the print media where the focus upon likeliness of people, word of mouth, data about their influential impact and their reviews and fanpage following along with possibilities of their purchase success or failure and realtime response on the chatbots is not possible in contrast today it has become an incredible possibility to land them on your page and get them following your brand and making the end user control your website with their content and ofcourse as a company the PR or marketing officer has to keep a constant vigil upon the comments and tweets shared by the users from time to time ranging several topics trending around sprung up by the audience in any minute is capable enough to affect our market share.

#### **ROADMAP STRATEGIES FOR COMPANIES GAINING GROUND-**

The custom of "Going viral" brings a lot of prosperity to any company. The greatest benefit rests in gaining the much needed attention that let people and audience always be gripped around your product by giving them several reasons to be yours either by being on their top of mind due to the trending sizzling news that need a solidarity drive or asking for the challenges i.e icebucket challenge and the current kiki challenge to prove on the media in a personalized fashion by setting new examples of what it means to be cool, so that the consumers are consistently spellbound by your product as the bandwagon effect captures the attention as many people talk about something increase and the message forwards marketing work today like spreading fire which is the greatest good when launching product or focusing on product sales or when marketer needs to be in the news to catch upon the market share to win the race.

As for instance Dominos generated a lot of excitement among pizza lovers introducing tweets to order system. To place the orders it asked Pizza lovers to order via twitter. The frequent customers can tweet Pizza emoji and collect the order on their doorstep.

The brand promotion platform allows the existing customers to indulge in brand advocacy wherein they speak of the production quality, authenticity, and the exclusive product offering, the sharing of the personal experience acts even better a medium to build a brand equity as people perceives the credibility of the product spread through word of mouth. The purpose of this paper is to understand the behavioral lessons and managerial implications of offerings for instance deep discount strategies used by e-commerce firms to gain a competitive advantage over rivals. We seeks to understand the behavioral aspects of consumer and competitor response to such online sales, particularly with reference to e-satisfaction and e-loyalty. The case study seeks to: understand the behavioral aspects of utility and customer satisfaction; understand the behavioral aspects influencing customer attitudes, preferences and choice; understand heuristics involved in consumer decision-making; and further it is possible for the firm strategise based on a thorough analysis of behavioral influencers of customer decisions.

With growing internet penetration, e-retail presents high potential in India along with its peers. However, the task of grabbing customer mindshare, as also a share of wallet of the growing Indian purchasing power through monster discounts and deals by e-tailers are working as of today. Firms such as Flipkart and Snapdeal are strategizing using principles of behavioral economics including confirmatory bias, framing effects, reference points, principles of loss aversion, heuristics and the peak–end rule to influence customer decision-making in their favor. Especially when the company surveyed they found that large population aspired for the products to be delivered to them at a reasonable price with certain features, characteristics and specifications. The alliance between various companies coming together at one online e-commerce platform was the resultant bringing more new shapes such as Freedom Sales, Big Billion day, They must also guard against any incidents/events which invoke the representativeness heuristic or negative confirmatory biases towards e-commerce portals. When Flipkart launched its Big Billion Day sale around a festival season. Initially the effort did not meet expectations due to technical glitches, but later it became a startling trend which was even followed by the Snapdeal and Amazon.

All Thanks to growing digitisation and internet penetration, the platforms are ready to serve millions. But beyond the metro cities, how many trust online purchases? That's where marketing takes over. New age tricks and strategies in marketing are changing the scope of Indian retail, and the coming week will demonstrate its success rate. Many Companies are throwing its dice with the marketing and sales strategies in a combo pack with the social media platform where many initiatives are being banked upon such as cash on delivery services, cash back offers, paytm offers, cashback using debit and credit cards of certain banks, getting huge discount if Amazon Prime Member. In addition the digitization has helped a lot in streamlining the things where the social media like Facebook and Instagram helps to target the lookalike audience in the analytics study and provided with myriads of certain options which ideally couldn't travel if it wasn't for the Social media. The Flipkart, Amazon, Jabong, Myntra, Hopscotch, and many more such brands announce many of their deals and gets a chance to display their articles in the news feed. Any such offers where some products are marketed exclusively on certain website is also a result of finding a marketing angle and discovering new methods and strategies to grab the market share and discard old outdated methods.

In the past active advertising by Flipkart, the most prominent of which was the 'Kids are Back' campaign. Despite controversy, the ad strikes a chord with the audience. What is the charm of children in the ad for an e-commerce company? Very few brands — Amul and Nirma being a couple — have been able to create a unique communication device. For a horizontal player, the kids theme helps connect multiple products to customers in an engaging way. Kids convey the message of simplicity and convenience of e-commerce. In an effort to build confidence among customers in tier 2 and tier 3 cities, who rarely shop online, Flipkart had launched the 'Flipkart matlab bilkul pakka' campaign over the internet and Facebook.

The Social Media campaign of Fair and Lovely i.e Bold and Beautiful also became very successful when the campaign endorsed the message of "Don't choose beautiful" and people were given a choice of walking through the door beautiful or average and this is how the message about definition of real beauty could travel by involving people in campaign who shared many likes and comments and surely such platform personalizes a relationship and enhance loyalty building. Mc Superbowl out of one of their campaign decided to give away their products for free if the audiences retweeted they automatically get a chance to win their product.

## **CONCLUSION**

The social media platform acts as a new advertisement, public forum chatbot as well as grievance handling and feedback analysis mechanism. The opportunities given upon the platform helps in harnessing better mileage for the visibility as well as creating a ground which is newsworthy. The times, styles and sources fade away with the moving times now the information travels fast just a click away people have become much better vigilant, alert and well informed and cannot be fooled away with an attractive advertisement. With the advent of such platform the reality cannot be denied that as they are superbeneficial in customer acquisition and market capture they are also excessively harmful and unpredictable. Each comment, like or news share is riding your company. Therefore the social media is considered as a huge opportunity to bank on but with little grain of salt the business man must operating taking care of the customer and emphasizing on the most primary aspects like correct and credible information disbursement, affordable and qualitative product, and last but not the least incorporation of upto date marketing and selling and winning strategies at par with the competitors each minute.

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**ROLE OF PRESS IN A DEMOCRATIC AND DEVELOPING SOCIETY**

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**ABSTRACT**

*The Press was an influential aspect in creating and expanding Indian nationalism and nationalist movement, communal, cultural, political, social and economical. The news may be colored with views and the comments and could influence our opinions. That is why press plays an important role in democratic country. It can make or break the governments. It can calm down the people or play up their passions, it can help the party in power to strengthen its Position or make the opposition to get the upper hand. Press not only leaves its impact on political life but also affects our social and economic life. It can help in tracing out the criminals. It can give expression to the grievance of the people and it can help the people to achieve their ends.*

*In a developing and democratic society the major issue for the press is to watch the democratic character of the political organization. There are many dangers to the democratic set up. The people in power try to encroach upon the rights of the common man. The people may not be able to enjoy their rights because of the interference of some. The press puts a check upon these types of tendencies by pin pointing the lapses of the party in power. The press can change the opinions of the people and the can party becomes unpopular.*

*The press can cultivate political outlook of the people and can help them in consolidating public opinion. Till the people are politically conscious and know about their own rights and duties, the working of democracy will be chaste. Press can often play negative roles. It may start instigating people against one or the other leader or against the party in power. Under such circumstance the security of the country may be in danger. In such cases people shall not allow the press to have its own way.*

*The role of the press can be conductive or destructive. If it plays a constructive role, the political organization will be more in agreement with the interest of the people. It will also stand for justice, mass participations and larger benefits of the people. There is possibility if the journalists are conscious of their duties. But it's better if the press is independent, responsible and enlightened. The study tried to analyze the impact of press on the Indian democracy and Indian constitution and have tried to answer that whether considering press as fourth estate of democracy is correct.*

*Keywords: Press, Democracy, Society, Liberty, Social, Economic, Cultural*

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**INTRODUCTION**

In countries where democracy prevails, freedom of the press is preserved and thus helps the individual considerably to frame his own judgments about issues. It also makes the Government, aware of the lapses or shortcomings of its aims and achievements.

Freedom of the press refers to freedom of speech and expression which is and always should be fundamental right. Without this right the liberty of man is not complete. A country pledged to democracy must ensure that its citizens enjoy a free and daily press. Press keeps a constant vigil on the liberty of the people. To remove any harsh Government or to tight against dictatorship, anarchy and malpractices, press serves the best. That is why, it may be called in the right proportion that press is the necessary pre-condition to the fulfillment of democratic ideologies.

Press is the voice of the people in democratic set up. Press plays an important role in bringing forward the real picture of the society to the common people. They raise voices against any anti-social practices such as dowry system, sati, child-labour, etc. In this way, malpractices prevailing in the society are checked and stopped.

In the communist countries, press is under Government control. Even in democracies the wrath of the ruling Government against any newspaper may snatch its freedom. At the same time, newspapers should not lace partial and biased news that may instigate the people against the Government. There should be a co-ordination between the Government policies and the people's vision. Only one thing that should be kept in mind is that newspaper must not be misused. It should be free, fair and unbiased.

**OBJECTIVES OF THE STUDY**

- To explore the Role and Responsibilities of Press in Democratic and developing Society.
- To analyze the relationship between Press and social progress.

- To shed light on the Extent and Indulgence of Press at National and International levels.
- To analyze the Social, Economic and Cultural Impact of Press in developing Society

### LITERATURE REVIEW

According to Desai (2010), the very fact that the British government had to enact a series of Press laws to repress the freedom movement proves the decisive role played by the Press in the growth and development of the nationalist movement.

Roy (2013) found that in countries where democracy prevails, freedom of the press is preserved and thus helps the individual considerably to frame his own judgments about issues. It also makes the Government, aware of the lapses or shortcomings of its aims and achievements. Press is the voice of the people in democratic set up. Press plays an important role in bringing forward the real picture of the society to the common people. They raise voices against any anti-social practices such as dowry system, sati, child-labor, polygamy, bi-gamy, untouchability, etc. In this way, malpractices prevailing in the society were checked to some extent and stopped. In the communist countries, press is under Government control. Even in democracies the wrath of the ruling Government against any newspaper may snatch its freedom. At the same time, newspapers should not give partial and biased news that may instigate the people against the Government. There should be a co-ordination between the Government policies and the people's vision. Only one thing that should be kept in mind is that newspaper must not be misuse its power. It should be free, fair and unbiased.

Pippa Norris (2006) illustrated that the structure of the news media and the roles that journalists adopt is an important component for more comprehensive understandings of regime change. The study therefore confirms many of the assumptions about the role of independent journalism, which are pervasive in liberal theory, including the core argument that the free press matters, both intrinsically and instrumentally. Policies which eradicate limits on the free exchange of information and communication, whether due to state censorship, intimidation and harassment of journalists, or private media oligopolies, therefore have important consequences for those seeking to strengthen both political and human development.

A study by Ansari, (2011) shows that, in recent years to rapid, and unprecedented, changes in our society, economy, and polity. These have also transformed the Indian mass media system. The growth in its scale, reach and influence, however, has not been matched by corresponding sensitivity towards non-commercial and non-market dimensions. This aspect is of relevance because the media is the fourth estate in a democracy. It plays a major role in informing the public and thereby shape perceptions and through it the national agenda. Its centrality is enhanced manifold by increased literacy levels and by the technological revolution of the last two decades and its impact on the generation, processing, dissemination, and consumption of news .

A study of Chowdhury (2004) depicts a robust link between a free, strong, and independent press and reduced corruption. A free press exposes private and public sector corruption. It monitors government officials and increases voters' knowledge, allowing voters to hold corrupt politicians accountable during elections, causing politicians to reduce corruption. A free and independent press can provide information and monitoring to the economic policy development process leading to more effective economic policies. It can also reduce political risk and increase good governance—conditions that are important for robust economic development.

In Addition, Alipour et al (2015), the press also brought to the Indian people, knowledge of the happenings in the international world. It became a weapon to develop solidarity ties between the progressive forces of different countries. Such was the role of the Press in the building up of an increasingly strong national sentiment and consciousness among the Indian people, in the development and consolidation of their growing nationalist movement, in the creation of national and provincial literatures and cultures, and in the forging of bonds of fraternity with other progressive peoples and classes in the outer worlds.

Dutta (2011) concluded that in Indian democracy media has a responsibility which is deeply associated with the socio economic conditions. The present scenario is not quite encouraging and certain areas need to be addressed. Media organisations, whether in print, audio visual, radio or web have to be more accountable to the general public. It should be monitored that professional integrity and ethical standards are not sacrificed for sensational practices. The freedom of press in the country is a blessing for the people. However, this blessing can go terribly wrong when manipulations set in. The self regulatory mechanism across media organisations need to be strong enough to stop anomalies whenever they occur. Agencies like Press Council of India need to be vigilant to stem the rot. Big media conglomerates are a serious threat. To counter this problem pluralistic media organisations which are financially viable need to be encouraged. Community participation is a goal that the media should strive for in a country like India.

A study of Tomojit Bhattacharjee (2015) found that the current scenario of new media usage by the public relations departments of the public sector establishments in India is quite nominal. The media strategies of these organisations do not involve the use of the social media and not many messages are conveyed directly to the people through the use of social media barring a few exceptions. In many cases, the websites of government organisations are poorly designed without adequate content and scope for real time dissemination of information. Most of the public relations establishments also do not have the manpower to deal with issues pertaining to new media, contrary to the trends in the private sector where there are dedicated professionals handling new media platforms.

The digital India campaign has many ambitious targets such as taking broadband connectivity to over 2,50,000 village panchayats, online public grievance redressal, workflow automation, e-education, e-healthcare, automation in judicial procedures, job creation etc. the programme intends to spend about a hundred thousand crores on the implementation of the existing schemes and another 13,000 crores for new schemes. Many existing digital media related schemes have also been incorporated into the umbrella programme called "Digital India" (Digital India document, 2015). This needs to be properly highlighted and presented by press in order to make people aware about it.

### **METHODOLOGY**

Research Methodology is a scientific and systematic way to solve research problems. A researcher has to design his methodology i.e. in addition to the knowledge of methods/techniques, he has to apply the methodology as well. The methodology may differ from problem to problem.

The data mainly from secondary sources. The secondary data will be collected from various sources to understand the various components of research such as mass media, Press and Indian society, which will be from journals, magazines, web sites etc. The secondary data will also be obtained from Newspapers (like Business Standard, Economic Times, The Times of India, Hindustan Time, Pioneer, etc.) and other magazines and visiting various sites on internet.

### **ANALYSIS AND FINDINGS**

**Role of the Press in the national movement:** The Press was a powerful factor in building and developing Indian nationalism and nationalist movement, social, cultural, political and economic.

The national movement, on its political side, was possible because of the facility of political education and propaganda provided by the Press. It was a weapon, in the hands of the nationalist groups, to popularize among the people their respective political programmes, policies, and methods of struggle, and to form organizations with a broad popular basis.

Without the Press, all India conferences of nationalist organizations could not have been prepared and held and big political movements organized and directed.

Since the Press was a powerful weapon of the nationalist struggles, the Indian nationalists staunchly fought for its freedom throughout the Indian nationalist movement.

The Press alone made possible exchanged of views among different social groups of different parts of the country. The establishment and extension of the Press in India brought about a closer and intellectual contact between the Indian people. It also made possible the daily and extensive discussions of programmes of inter-provincial and national collaboration in sphere of social, political and cultural. National committees were appointed to implement the programmes adopted at these conferences throughout the country. This led to the building of background for freedom struggle.

The Press also helped the growth of provincial literatures and cultures, which were provincial in form and national in content.

The Press was an effective weapon in the hands of social reform groups to expose social evils such as caste systems, child marriage, ban on remarriage of widows, sati, polygamy, bi-gamy social, legal and other inequalities from which women suffered. It also helped them to organize propaganda against such inhuman institutions as untouchability. It became a weapon in their hands to reach and propagate to the masses their principles, programs, ideas and methods of freedom struggle and democratic reconstruction of the Indian society.

### **THE MEDIA AS THE 'FOURTH ESTATE': BASIC FUNCTIONS OF THE MEDIA IN A DEMOCRATIC SOCIETY**

- Inform the public on what is going on: inform democratic choices through the clarification of complex issues, particularly in an age when information is the driving force of economic advancement and international events impact on people's daily lives as never before;

- Provoke public debates leading to greater public participation in important decisions;
- Uncover abuses, pressure for their rectification;
- Alert and mobilize public opinion to humanitarian causes/injustices;
- Allow political pluralism to express itself by advertising different views/ ideological approaches to certain issues;
- Keep politicians attuned to public opinion while offering politicians a medium to explain policies/decisions to public and build the necessary support.

### **THE RESPONSIBILITY OF THE PRESS AND MEDIA TOWARDS SOCIETY**

A totally impartial media is neither possible nor practical. Most newspapers have political or ideological preferences but, it is:

- Essential to maintain distinction between facts and opinion, reporting and analysis;
- Use only trained, professional reporters with knowledge of subject and who check sources before reporting;
- Set the political agenda: explain issues without trivializing or sensationalizing;
- Publish corrections;
- Preserve state secrets / not use information likely to be harmful to national security or to endanger individuals.

### **THE RELATIONSHIP BETWEEN POLITICIANS AND THE MEDIA**

Basically it is a love and hate relationship. Both need each other; the one to provide the information, the other to communicate it. The role of the media in a democracy is the result of the permanent "creative tension" between the two sides. It is a messy system but the alternative is a media that is excessively docile or excessively critical of the fact that politics is only "the art of the possible". The government wants to control the release of information and present a united front; the media like to look for the cracks and the contradictions. One likes good or predictable news - "dog bites a man"; the other likes bad news or the unusual - "man bites a dog". The politicians like to present their successes and their opinions, through the use the media to gain public recognition and enlarge their authority; the media's role is to question these critically, to analyze, to judge and to revitalize - the role of the media is never to blindly or unquestioningly support a given political party or cause. That not only undermines the credibility and value of the media (which becomes simply a propaganda machine); it also undermines the political party or cause as no institution can thrive and adapt to change without regular, constructive criticism.

If the media are to do their job seriously, politicians must treat the media seriously. Regular flow of information, briefings, an honest objective approach, never lie. If the media do not get information from you, they will usually get it from someone else - less accurately.

### **MEDIA FREEDOM AND PEOPLE PARTICIPATION**

Media freedom shapes the social, legal, political, economic and the cultural factor. People know very less about the political issues and activity in countries where the government interfere with the media. Once the government starts interfering with the media the information about the policies and the action of the government is prevented from reaching the people. Therefore the person becomes politically ignorant in such situations. And when the person becomes politically ignorant the government functionaries may not continue to function the way it should function. In fact in such circumstances the government seizes to be accountable. Also the political leader may exploit the government resources for their personal interest. So the cases of corruption are bound to increase at a fast pace in such circumstances. This has a very adverse impact on the development of the country. So in countries where the government does not interfere with media, people participation in the functioning of the governance is more and the people can easily punish the corrupt politicians. So free media repeatedly report the action of the government to the people and it put everything in front of the people to decide whether if it is right or not.

When people are not informed of the political activity, they become ignorant of the political issues as mentioned above. So when the media is not free the information does not reach the people and the people lose interest participating in the government functions. Also when the information about the political leader and the political parties does not reach the people, they become unaware about the detail the political party or candidate of the election. So either they vote in darkness or they chose not to vote. So, lack of information has a very adverse

impact on the voter's turnout. So, free media play a very significant role in enhancing the voter's turnout. As voter's turnout is a very essential aspect of democracy it definitely contributes to the strengthening of the democracy.

### **FIGHTING CORRUPTION**

Corruption is one of the major hindrances to success of democracy and to the development of the nation as well. There have been a number of instances where the corrupt government officials have exploited the national resources for their personal benefit. So this has to be stopped otherwise the main goal of democracy especially in India would never be achieved.

So transparency is most effective solution to such problems. According to Bentham," The greater the number of temptation to which the exercise of political power is exposed, the more necessary is it to give to those who possess it, the most powerful reason for resisting them. But there is no reason more constant and more universal than the superintendence of the public". So, transparency is one of the most effective tools to fight corruption.

Now what is transparency? Transparency literally means that the every information related to something is made available to everyone and nothing is hidden from anyone. So an institute is transparent only if the people can inquire about all the information related to it. Whether the inquiry of the people is related to the functioning of the institution or the action, if it provide all information to the people then it is a transparent institute. So it's the media who help the people to collect information from these institutes easier and cheaper. So, a medium play a vital role in digging out the facts from these transparent institutes and makes these facts available to the people.

There are two different types of transparency i.e. agent controlled and non-agent controlled. So this second type i.e. non-agent controlled transparency created by the media. It extracts the fact and information's from the institutes and makes it available to the people. And this role off media makes the life of corrupt government officials tough. The media even at times releases the secret files which may include the actual instance of corruption.

So media play a very vital role in fighting corruption. As in it collects the information from the institutes and then publicize it and hence the government functionaries becomes more accountable. So media contribute a lot to these three processes namely transparency, publicity and accountability which strengthen the democracy.

### **ROLE OF MEDIA IN PUBLIC POLICY**

The inception of the democratic institutions dates back to the French revolution in 1789. There were three centers of power namely the monarchy, the church and the feudal lords during those days. So the fourth estate 'media' was added by the French revolution. It was because of the major roles played by the media in the democratic institutions. So even during the inception era of democracy the media had a very important role to play. Therefore we can't imagine democracy in present day without media.

Media shapes the policy making of a country. Actually the policy making is composed of policy inputs (which influence the formation of policy), policy process and the policy output. The policy process is nothing but shaping of the policy by the various institutions. The policy output is actually authoritative action i.e. the decisions of the government on various problems of the people. And this policy outputs are the concrete products of the entire process. Media directly can't shape the policy but definitely it can criticize the policy and force the government to change the policy in case if it is not in the interest off the people.it is because mediates between the state and the society and hence criticise by the media has very adverse impact the popularity of ruling party. In a way media exercises the decisive influence over the public policy.

There are aspects which facilitate the interaction between the media and the policy. One such aspect is the passive-active. When the media simply report about a story and simply summarises the entire story, this behavior of media is passive. When media is passive it does not inquire about the story in detail. It simply repeats the important and highlights the important facts. When media becomes aggressive it repeatedly research and make the story (which would not have been a story without its efforts), then this behavior of media is said to be active. When media behaves actively, it influences the policy making as it gather almost all information about any policy and then highlights it.

Media is the regulating flow of communication between the policymakers, policy and others in any political system. This role of media influences the policy making and hence makes a country and its political system more democratic.

**CONCLUSION**

The purpose of the press is to keep in public spotlight every deliberation and decision that the government makes, since everything the government does is to be done on the people's behalf for their well being. This constant spotlight will no doubt exert continuous pressure on the members of public office, but it is exactly this pressure that keeps their role as public representatives – fulfilling the interests of the public – above their role as private citizens – fulfilling personal interests. If the mind of the general public is to take an integral part in political discourse – a thing without which a democratic society cannot exist – it must be constantly directed there by the members of the press. Any proposed action or change by the government must be researched and examined in detail, with conversation and debate promoted around areas of import.

Members of the public cannot sit still and be passive participants of their state, but must, for the state to be a democracy, take an active role in asserting their will. The role of the press is to support this in two ways: 1) to inform the public on what is being discussed, and the background to what is being discussed, and 2) to promote conversation and debate around political issues so that no change or action may go through unnoticed. For such things, not being approved by the public, cannot with any certainty represent the will of the public.

This role of the press is irrelevant in any political system other than a democracy because such systems need to represent the will of the people. For a democracy to be a true democracy, the people must be active participants in political discourse, and for this to happen, the press itself must be an active agent that brings this about. The role of the press is not to entertain or to educate, or even to merely inform but the role of the press is to bring about real political discourse. All else is trivial.

The study shall be of immense benefit to the society as a whole. It will be beneficial particularly to the Indian people, by affording the knowledge of how they have fared since independence on the enthrone and sustenance of democracy in India. The study shall let them know the true position in the democracy struggle in India and shall let them know how well or otherwise they have performed and their expected roles in the democracy struggle. The study shall open up to the journalism the constant hazards and obstacles that have impeded or hindered the performance of their roles in the enthrone of democracy in India and shall give break light on how to remove the constraints.

It would also help the civil servants to know how they have helped or hindered the press in performing its expected roles in democratic struggle. Thereby, the study shall be a source of aspiration for change in their attitude towards press and their roles in a democratic dispensation.

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**BENEFICIATION OF COAL BY ULTRASONIC PROCESS**

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**ABSTRACT**

Coal is used mainly in power plants. But in India the coal used are of low quality containing high ash%. So to improve carbon % and reduce ash % a treatment called ultrasonic treatment was done. In ultrasonic treatment ash % was reduced by applying 20 KHz frequency through the ultrasonicator. Coal samples for ultrasonication was obtained by coning quartering of samples from coal of (i) feed to heavy media cyclone and (ii) cleaned coal obtained after washing. Then crushing of coal samples was done by jaw crusher and pulverizer. By sieving through 210 microns and 100 microns sieves coarse coal samples of size range (-210 to +100)microns were obtained. Then taking 2.5 g samples from each treated coal proximate analysis was done. The coal samples were treated in a ultrasonic processor at 20 kHz frequency by applying power of 1500W. Two coal sizes of 210-100 microns and 100-50 microns were treated. The ultrasonic process was done at room temperature, first in mixed alkali medium (1:1 w/v NaOH and KOH solutions) and then in water medium separately by varying time. Then coal particles were broken and ash and other lighter impurities went up due to lower density and carbon layer went down due to higher density. They were separated by gravity separation process and further collected at different layers. Then again proximate analysis was done and the results of proximate analysis before ultrasonic process and proximate analysis after ultrasonic process were compared. By XRD ash content in coal was revealed. By SEM cavitations in the coal structure were observed and by EDS ash and carbon percentage was determined. Finally it is concluded that by ultrasonic treatment of coal carbon % increased and ash% decreased compared to the coal before the treatment. Hence coal quality was improved.

*Keywords: EDS, XRD, SEM, NaOH and KOH solutions, Coal, Ultrasonic*

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**INTRODUCTION**

Coal is the most abundant fossil fuel on earth. It is a flammable black hard rock used as a solid fossil fuel. It is primarily made up of 65-95% carbon and also contain hydrogen, sulfur, oxygen and nitrogen, it is a metamorphic rock formed from peat, by the pressure of rocks laid down later on top. Coal is of 5 types. They are peat, lignite, bituminous, sub-bituminous and anthracite. It is a cheap fuel and the largest source of fuel for generation of electricity throughout the world. It has some of the largest deposits in countries such as United States, china, India. The power sector is the main driver of India's coal consumption. In coal, Sulfur is found in two forms: inorganic sulfur and organic sulfur. Sulphate-sulfur occurs in either Ca or Fe. Pyritic sulfur refers to iron disulfide (FeS<sub>2</sub>) as pyrite, marcasite and melnikovite-pyrite. Organic-sulfur is chemically bonded and very difficult to remove by physical cleaning methods. Release of SO<sub>2</sub> also contributes to the widespread acidification of ecosystems. In India sulfur content in coal is negligible. Higher sulfur content coals are found in India only in few states like Assam, Nagaland etc. Around 25% of coal is ash. Coal ash is hazardous and toxic to human beings and other living things. It contains the radioactive elements uranium and thorium and is more radioactive than nuclear waste. Coal ash and other solid combustion byproducts are stored locally and escape in various ways that expose those living near coal plants to radiation and environmental toxics. Research says that use of coal on this scale generates hundreds of millions of tons of ash and other waste products every year. These include fly ash, bottom ash, and flue-gas desulfurization sludge, that contain mercury, uranium, thorium, arsenic, and other heavy metals, along with non-metals such as selenium. Therefore it is needed to remove mainly ash and sulfur from coal. There are various attempts made in different ways for treating coal to reduce ash content in it. The methods used are by crushing coal, pulverizing them, sieving the coal to micron level, doing proximate analysis, leaching by alkali, varying frequency and power in ultrasonic process.

**METHOD**

**As per treating in washery plant coals are divided into 3 types**

1. Coal feed to heavy media cyclone (before washing)
2. Rejected coal after washing
3. Cleaned coal after washing

First coning and quartering process was done to collect 2kg from each type of coal samples. This action caused the grain sizes to become evenly distributed down through the cone. The coal lumps they were then first crushed through jaw crusher to obtain coal particles smaller than 5cm, then again crushed by pulverizer. After crushing the coals were sieved to get a particle size smaller than 210 microns. Sample size variations were taken between 210-100 microns, 100-50 microns. Then the sample of cleaned coal after washing each of weight 2.5gms was taken in 2 crucibles to do proximate analysis at 120<sup>0</sup>C for 2 samples for 1 hr. Then after taking them out the crucibles were weighted again. The weight differences between before heating and after heating were measured and moisture percentage was calculated. First the muffle furnace was heated to 900<sup>0</sup>C and the crucibles were placed in it for 7 min and after that by taking out the crucibles weight of samples with crucibles were calculated again and then percentage of volatile matter were calculated. After that again putting the crucibles till the samples were burned fully at 900<sup>0</sup>C weight of ash formed samples with crucibles were taken and after that calculation of ash percentage and then fixed carbon percentage were done. Then averages were taken. For the other coal samples of feed to heavy media cyclone, proximate analysis were done in the same way by taking 3 samples.



Figure-1

After it ultrasonic process was done where 20 gm of coal samples was taken and mixed with 200ml water. The process was carried out for 2hrs. 1500wt power was applied to the coal slurry. After ash was found floating on the upper part and carbon was below forming another layer, they were separated and dried in an oven at 1750C. After drying the samples were crushed to form powder again. Then again proximate analysis was done to get ash content to compare the ash percentage. Then after water, 1:1 KOH and NaOH (each 1 M) taken and mixed with 200 ml of water in 200 ml of glass beaker. 20gm of two coal samples of different sizes were taken and mixed with the mixture. Then sonication of the sample started in the same process and then also proximate analysis is done.



Figure-2

Then XRD was done to reveal reduction in ash content in coal through ultrasonic process and SEM was done to study the occurrence of cavitations in the coal structure. Then EDS was done to know the ash % and carbon % in the ultrasonically treated coal samples.

## RESULTS

After proximate analysis of coal sample -1 and sample-2 we get the following results:

### SAMPLE-1

Weight of sample +weight of crucible after heating in oven for 120<sup>0</sup>C for 1hr=39.215gm

Weight of sample +weight of crucible after heating in furnace at 900<sup>0</sup>C for 7mins=38.429gm

Weight of sample +weight of crucible after heating in furnace at 900<sup>0</sup>C till total carbon burned=37.447gm

**SAMPLE-2**

Weight of sample +weight of crucible after heating in oven for 1200C for 1hr=40.252gm

Weight of sample +weight of crucible after heating in furnace at 9000C for 7mins=39.346gm

Weight of sample +weight of crucible after heating in furnace at 9000C till total carbon burned=38.453gm

**Table-1: Proximate analysis of feed coal, cleaned coal, ultrasonic treated feed coal, ultrasonic treated cleaned coal**

SAMPLE NAME	MEDIUM	AVG. FIXED CARBON %	AVG. ASH %	AVG VM %	AVG MOISTURE %
Feed coal	-----	19.62	47.76	26.334	6.28
U.S Feed Coal(210-100)	KOH & NaOH	34.43	27.66	33.79	3.33
	Water	24.11	47.33	24.22	2.33
U.S Feed Coal(100-50)	KOH & NaOH	38.44	28.66	28.88	4.33
	Water	26.66	43.66	25.67	4
Cleaned Coal	-----	34.911	20.14	36.829	8.12
U.S Cleaned Coal(210-100)	KOH & NaOH	35.5	19.66	39.16	5.66
	Water	40.77	20	36.052	1.5
U.S Cleaned Coal(100-50)	KOH & NaOH	44.37	18.33	30.96	6.33
	Water	64.04	10.66	23.63	1.6

After proximate analysis EDS was done and the following results are obtained.

For sample-1(USS-III (KOH &NaOH) of size (100-50)microns)

C has weight%-43.27% and atomic%-54.97%, O has weight%-35.75% and atomic%-34.10%, Na has weight%-7.89% and atomic%-5.23%, Al has weight%-1.39% and atomic%-0.78%, Si has weight%-2.28% and atomic%-1.24% and K has weight%-9.42% and atomic%-3.68%.

For sample-2(USS-III (water) of size (100-50) microns)

C has weight%-64.83% and atomic%-72.40%, O has weight%-29.85% and atomic%-25.02%, Al has weight%-1.93% and atomic%-0.96%, Si has weight%-3.39% and atomic%-1.62%.

For sample-3(USS-I (KOH &NaOH) of size (210-100)microns)

C has weight%-34.97% and atomic%-46.44%, O has weight%-40.74% and atomic%-40.61%, Na has weight%-5.40% and atomic%-3.74%, Al has weight%-2.80% and atomic%-1.65%, Si has weight%-6.17% and atomic%-3.50% and K has weight%-9.93% and atomic%-4.05%.

For sample-4(USS-III (water) of size (210-100) microns)

C has weight%-37.79% and atomic%-47.66%, O has weight%-45.76% and atomic%-43.32%, Al has weight%-6.64% and atomic%-3.73%, Si has weight%-9.81% and atomic%-5.29%.

For sample-5(USS-III (KOH &NaOH) of size (100-50) microns)

C has weight%-35.59% and atomic%-31.33%, O has weight%-20.01% and atomic%-37.37%, Na has weight%-12.35% and atomic%-9.36%, Al has weight%-7% and atomic%-6.27%, Si has weight%-12.65% and atomic%-10.13% and K has weight%-12.40% and atomic%-5.53%.

For sample-6((KOH &NaOH) of size (100-50) microns)

C has weight%-38.36% and atomic%-49.66%, O has weight%-39.84% and atomic%-38.72%, Na has weight%-9.08% and atomic%-6.14%, Si has weight%-2.68% and atomic%-1.49% and K has weight%-10.04% and atomic%-3.99%.

**By comparing the EDS data the following results are concluded**

Wt% of carbon is higher in case of USS-III(C.C)(water) of size(100-50)microns in comparison to USS-III(C.C)(KOH &NaOH) of size(100-50)microns.

Wt% of carbon is higher in case of USS-I(F.C) (KOH &NaOH) of size(100-50)microns in comparison to USS-I(F.C)(KOH &NaOH) of size(210-100)microns.

Carbon wt% is less in case of USS-III(C.C)(water) of size(210-100)microns in comparison to USS-III(CC)(KOH &NaOH) of size(210-100)microns

After EDS process XRD was also done and the graphs are as below

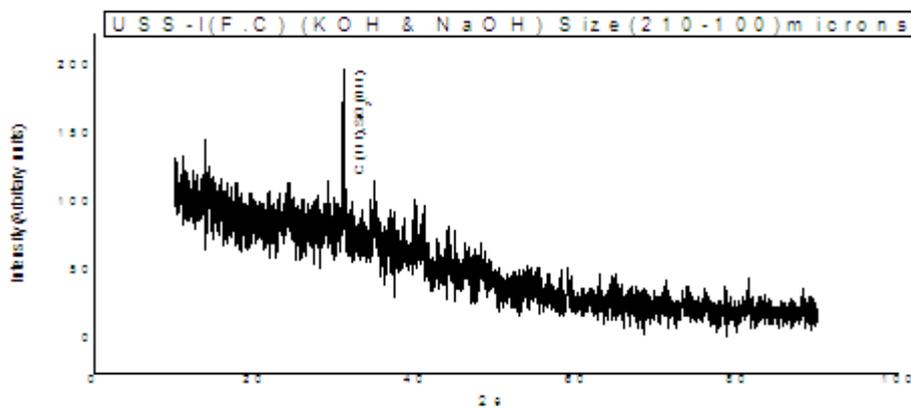


Figure-3

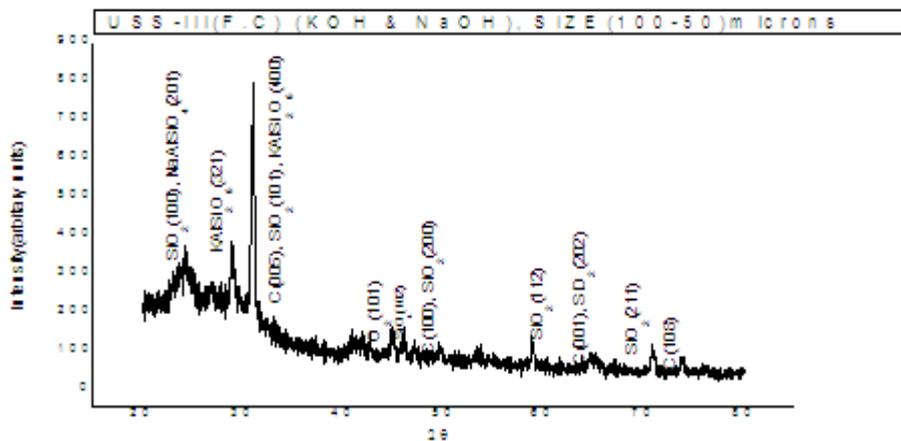


Figure-4

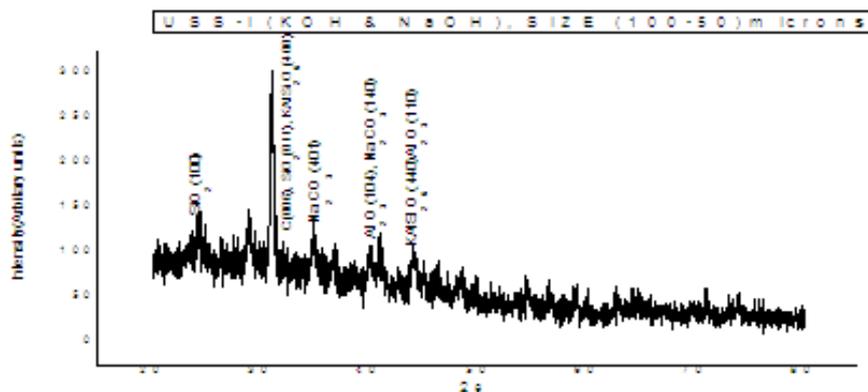


Figure-5



**CONCLUSION**

Ultrasonically treated feed coal with alkali medium shows greater carbon % and greater ash removal compared to ultrasonically treated feed coal with water medium. Effect of size on ash removal in ultrasonically treated feed coal is not significant. In ultrasonically treated cleaned coal in water shows greater ash removal and increased carbon %. Ultrasonic treatment of cleaned coal with water medium shows maximum removal compared to ultrasonic treatment of cleaned coal with alkali medium. Effect of size shows that in finer coal (100-50)microns in cleaned coal ash removal is better than coarse coal(210-50)microns. It is concluded that by ultrasonic process ash wt% also decreased as compared to coal before ultrasonic process. It is seen that after ultrasonic process coal wt% increased significantly. Best result was obtained by ultrasonication of cleaned coal of fine size (100-50) microns in water medium i.e. 64.83gm with greater ash removal.

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**PROMOTING INTERNATIONAL COLLABORATIVE ACADEMIC PRACTICES USING SOCIAL MEDIA TOOLS**

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**ABSTRACT**

*Social networking sites are becoming popular online destinations that offer users' easy ways to build collaborations and maintain relationships to create disseminate and share knowledge and information. Social networking and communications tools have become widely used in entertainment and social applications and there is growing interest in their use in formal education applications. Participation in online social networks may enhance learners' connections to their local community and also with distant others they perceive as similar may be especially important to their educational attainment and academic engagement. However, the full potential of social network sites has yet to be achieved as users continue to strive for optimal ways of using these sites, as well as challenges related to privacy, security, governance, user behavior and information quality of these sites are still quite prominent. This paper reflects upon how international collaborations may occur and be promoted through the use of social software and social networks. It addresses the role that computer-mediated communication through social media tools can play to offer new educational affordances and avenues for students to interact with each other and with their teachers or tutors with the costs and benefits of social media tools when applied to academic practices.*

*Keywords: Social Software, Social Networking Tools, Collaborative learning for STEM students*

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**INTRODUCTION: SOCIAL NETWORKS**

The information revolution has been one of the most rapidly expanding movements in the modern era, fueled especially as it is by the growth and development of the World Wide Web. And one of the newest products of the Internet is social software and social networks. The term social software refers to set of network tools designed specifically to support sharing, collaborating and socializing, resulting in the development of multiple forms of social capital (Jones & Thomas, 2007). Educational social software was defined in 2005 as “networked tools that support and encourage individuals to learn together while retaining individual control over their time, space, presence, activity, identity and relationship” (Anderson, 2005). Huertas, Casado, Corcoles, Mor and Roldan (2007) characterize social software as 1) student-centered when students develop their own knowledge, 2) collaborative when teachers and students function as peers in a social network, and 3) transitional when the traditional learning environment shifts to a much more open learning environment. When used effectively these new technologies have the potential to allow students to ‘speak’ to a world far beyond their local community. In doing so they can empower students to write and publish for a worldwide audience, not just to be the audience (Wells, 2005)

**SOCIAL NETWORKING SITES AND TOOLS**

A number of SNSs are available for use, each possessing a set of both common (to all SNSs) and specific functionality. Blogging are online journals, published through the Web interface, and focused on topics reflecting the interests of the authors. Wikipedia is an online open source encyclopedia built by aggregating wikis, which are tools of collaborative authoring of tagged hypertext content. Flickr is an easy to use photo sharing service that allows users to upload, tag, and share photos. MySpace and Bebo allow users to build, launch and share their multimedia Web presence, and invite friends to form social networks. Facebook is a particularly popular online social networking community similar in functionality to MySpace and Bebo. LinkedIn is a social network for business professionals. Del.icio.us is a bookmarking service that allows users to create their tagged bookmarks in shared Web spaces. Blackboard/WebCT is a learning management system that provides learners with opportunities to share comments and insights on particular aspects of courses with teachers and peers. SNSs are extremely flexible to use and expand opportunities for socialization. Wikis are an example of social software that is being used in knowledge building networks, both within and beyond education. Ward Cunningham developed wikis (collaborative Web 2.0 authoring tool) for the Internet in 1994. “Wiki” comes from the Hawaiian word wiki-meaning swift or quick. The first wiki (WikiWikiWeb) was created by Cunningham. Since then, a number of wiki applications (e.g., DocuWiki, PBwiki, Wiki Spaces, and Media Wiki) have been developed to support a variety of group projects. The primary communication methods of social software applications, wikis rely on, is of “many to many”, that provides for maximum collaboration and shared authoring. (Augar, Raitman, & Zhou, 2004; O'Reilly, 2007). In brief, it is a virtual home where we could nurture and grow our collaboration far beyond what we had been able to do in our face-to-face meetings.

Collaborative nature of the wiki provides built-in opportunities for students to reflect and comment on one another's work as well as on their own. Wikis have been called "an effective tool for educators" (Robinson, p. 106, 2006). They enable students to collaborate in a space that is immediately updated (Bold, 2006). Wikis can be used to encourage collaboration among students by allowing them to read and edit each other's work. Collaborative writing assignments with wikis encourage students to review each other's pieces and truly reflect on and critique what is being put together instead of just pasting separate components together (Ben-Zvi, 2007). Wiki discussion area (called "Discussion Forum") is used as a collaborative space for responding to prompts from user to user and for presenting questions to the learning community for reflective comment. (DeArment, 2002).

Here, is a list of some of the tech tools, that are becoming increasingly popular and widely used, that should be part of any teacher's tech tool whether for their own personal use or as educational aids in the classroom. These tools use the power of social media to help students learn and teachers connect.

1. **Edmodo:** Teachers and students can take advantage of this great tech tool, as it offers a Facebook-like environment where classes can connect online.
2. **Grockit:** Get your students connected with each other in study sessions that take place on this great social site.
3. **Skype:** Skype can be a great tool for keeping in touch with other educators or even attending meetings online. Even cooler, it can help teachers to connect with other classrooms, even those in other countries.
4. **Pinterest:** You can pin just about any image you find interesting on this site, but many teachers are using it as a place to collect great lesson plans, projects, and inspirational materials.
5. **Schoology:** Through this social site, teachers can manage lessons, engage students, share content, and connect with other educators.
6. **Quora:** While Quora is used for a wide range of purposes, it can be a great tool for educators. It can be used to connect with other professionals or to engage students in discussion after class.
7. **Ning:** Ning allows anyone to create a personalized social network, which can be great for both teachers and students alike.
8. **OpenStudy:** Encourage your students to work together to learn class material by using a social study site like Open Study.
9. **ePals:** One of the coolest benefits of the Web is being able to connect with anyone, anywhere. ePals does just that, but focuses on students, helping them to learn languages and understand cultures different from their own.
10. **Khan Academy:** Many teachers use this excellent collection of math, science, and finance lectures and quizzes to supplement their classroom materials.
11. **MangaHigh:** MangaHigh offers teachers a wealth of resources for game-based learning in mathematics.
12. **FunBrain:** If you're looking for a great collection of educational games, look no further than FunBrain. On it, teachers can take advantage of fun tools for math and reading.
13. **Educreations:** Educreations is an amazing online tool for the iPad that lets teachers (or students) create videos that teach a given topic. Perfect for studying or getting students to show off their knowledge.
14. **Animoto:** Animoto makes it simple to create video-based lessons or presentations for the classroom and to share them with students or anyone else.
15. **Socrative:** Available for computers, mobile devices, and tablets, this student response system engages students through games and exercises on any device they have on hand. Even better, teachers can easily assess student progress and track grades.
16. **Knewton:** Adaptive learning has been a hot topic in recent months, and with Knewton it's something that any teacher can access and use. The site personalizes online learning content for each student according to his or her needs.
17. **Kerpoof:** On Kerpoof, students can get creative with their learning with games, interactive activities, drawing tools, and more that are both fun and educational.

18. **StudySync:** With a digital library, weekly writing practice, online writing and peer reviews, Common Core assignments, and multimedia lessons available, this site is a fully-featured tool for teaching and learning that can be a big help in the classroom.
19. **CarrotSticks:** On this site, teachers can take advantage of a wide range of math learning games, giving students practice while they have fun.
20. **Teachers Pay Teachers:** Have great lessons to share? Looking for something to add to your classes? On this site you can do both, selling your own class materials and buying high-quality resources from other teachers.
21. **Planboard:** Make sure your lessons are organized and that your day runs smoothly with the help of this amazing online tool designed just for teachers.
22. **Timetoast:** Timetoast is a pretty cool for student projects, allowing them to build sleek, interactive timelines in minutes.
23. **Capzles:** There are so many different ways that Capzles can be used in the classroom, there's bound to be an application that fits your needs. What does it do? Capzles makes it simple to gather media like photos, videos, documents, and even blog posts into one place, making it perfect for teaching, learning, or online projects.
24. **Popplet:** You and your students can use Popplet to brainstorm ideas, create mindmaps, share, and collaborate.
25. **Google Earth:** From geography projects to learning about geological processes, Google Earth can be an amazing and fast way to show students anywhere in the world.
26. **DonorsChoose:** Need funding for a classroom project? You can get it through this site that hooks up needy teachers with willing donors.
27. **SlideShare:** With SlideShare, you can upload your presentations, documents, and videos and share them with students and colleagues. Even better, you can take advantage of materials that other have uploaded as well.
28. **LiveBinders:** Like a real-life three ring binder, this tech tool allows you to collect and organize resources. Much better than a binder, however, the site also comes with tools to connect and collaborate and a virtual whiteboard.
29. **AudioBoo:** Through this tool, you can record and share audio for your students or anyone else.( Edudemic .Connecting education and technology <http://www.edudemic.com/2012/08/50-education-technology-tools-every-teacher-should-know-about/> )

### ROLE OF SOCIAL NETWORKING IN EDUCATIONAL ARENA

The use of social software and social networking has been growing exponentially with applications in social, gaming, media, business, and education contexts. Education is an evolutionary realm; it has been changing and including new practices since its beginnings in order to support changes in society. Beyond the people connection capabilities, one of the most important contributions of social networks to the education realm is the opportunity to share knowledge, and to be able to use this knowledge to solve common problems along the social network. Knowledge is represented into a social network by the content shared and created by the users, so that, in an educational social network, not only teachers are responsible to create new content and to answer questions, but also students have the same chance to contribute to the collective learning experience. Dron and Anderson (2007) note that an essential characteristic of social software is that it scales well and gains strength from large numbers of users, thus making them attractive and cost-effective for use in both campus and open and online education contexts. In research using the social software platform Garrett, Thoms, Soffer, and Ryan (2007) found that access to peer work and peer relations improved both the perception of social presence and students' motivation. These technological resources can liberate and support the development of powerful and dynamic learning communities. Students can be involved in cross-sector, cross-state, national and international collaborative projects which foster a sense of place and purpose in a global community. Students of all ages learn best when immersed within a culturally and socially rich environment where learners and peers have the same goals. They can gain access to information sites such as Wikipedia, the Open Encyclopedia and Wiki books while employing Web2 technologies that empower educators and students to rapidly create and publish their own content. Richardson calls them 'A new world wide web' (Richardson, 2006) which allows a far

greater involvement and interaction between all users. Through learning collaboratively, students can also learn the art and skill of building relationships with others. They can recognize the value as well as the challenges of mutual inquiry and problem-solving. Moreover, they can come to new understandings of themselves as responsible creators of their own knowledge and meanings. (Benichou, J.H., Huggard, K., 2009). In recent years social networking systems, which make use of Web 2.0 technologies, have received much attention in higher education as increasing numbers of younger people (typically less than 30 years old) have made use of public systems such as Facebook and MySpace. Such systems, coupled to other Web 2.0 tools (e.g. social bookmarking and syndication technologies) help individuals or groups to readily create or find and then share knowledge [Selwyn, N. (2007)]. Critically the capability of these systems to enable forms of communication controlled by the user makes them very different to the ubiquitously used and increasingly corporate virtual learning environments (VLEs). In social networking systems the individual user (or groups of users) can decide what they wish to discuss and who they wish to work together with [Hinchcliffe, D. (2007)]. This means that social networking systems truly have the capability to deliver a platform for learning where the student is potentially at the centre of activities. Educational technology, especially computers and computer-related peripherals, have grown tremendously and have permeated all areas of our lives. It is incomprehensible that anyone today would argue that banks, hospitals, or any industry should use less technology. Research centers with no computers would arouse suspicion about the completeness, accuracy, and currency of their information because science and mathematics information grows daily and much of that new information can only be found through the use of technology.

A study was conducted on 257 undergraduate students in the University's School of Biological Sciences where they were asked to use the social media site Google+ as part of a key IT and numeracy skills module. The students were able to discuss parts of the module on the site.

At the end of the term, the students had contributed thousands of posts and hundreds of thousands of words to Google+. The researchers analyzed these contributions, along with students' responses to a questionnaire about how they found the module.

(Credit: Image courtesy of University of Leicester,

<http://www.sciencedaily.com/releases/2013/04/130429094946.htm>). United States National Science Foundation reports (NSF 1996,2000,2004) stress upon the efforts to recruit and retain students chronically underrepresented in STEM fields. The most marginalized among these groups are students with disabilities (Wolanin & Steels,2004). The way to serve these marginalized students is through social media tools in mentoring relationship using electronic media (Todd,2012) i.e social media is used as online mentoring tool for stem students with and without disabilities (C.Stephanidis & M.Antona,2013.)

### **COLLABORATING KNOWLEDGE THROUGH SOCIAL NETWORKING SITES**

Cooperation between students is often analyzed in terms of cooperative or collaborative learning theories, which almost always assume a group production mode in which presence, common objectives, interdependence, peer interaction, and information sharing are essential components (Slavin, 1985). Abbasi, Hossian, Uddin, and Rasmussen (2011) noted three levels of collaboration that exist among scientific researchers. First, there are macro-level collaborations involving large initiatives by collaborating nations or large international organizations. Then there are meso-level collaborations; usually these involve collaborations among individual institutions, such as universities working across national boundaries. Lastly, there are micro-level collaborations, which involve single researchers or small groups of individuals working together. International collaboration, from different perspectives, would create a richer reference tool. Abramo, D'Angelo, and Solazzi (2011), wrote that international collaborations offer greater results due to the "heterogeneity of resources (both intellectual and other)" (p. 205). The dissimilarities in language, culture, and general outlook provide a richer work relationship. It seemed reasonable to assume that in international collaborations, precisely because of the differences between partners, the expected results would be more meaningful. Even De Dreu and West (2001) studies of group creativity confirmed that it is diversity rather than conformity that leads to more innovative and higher quality results. While students in traditional classrooms have been limited by the four walls of their room and the two covers of their textbook, 21st-century students have the opportunity to reach across oceans to learn from their peers on the opposite side of the world. Classrooms that aim to raise students to global consciousness can't afford to miss out on international educational collaboration. Students interact with people their own age in a place they've never seen, and may have never even conceived of before. International educational collaboration, powered by the internet, allows those students to get a view of the world in a fresh and inviting way. In recent years, with larger bandwidth availability to a large public, the use of real-time web conferencing software (such as Elluminate, WebX, and Adobe Connect) has also been growing. These systems use real-time

audio-video communication systems to simulate classroom-based learning, and, in some ways, add functionality to go beyond classroom-based learning, including diverse collaborative functions such as document sharing, whiteboard, chat, polling, and application sharing. (Bruno Poellhuber and Normand Roy, Terry Anderson, 2011). Web conferencing systems are increasingly used as tools to replace face-to-face meetings or to mimic the traditional class environment, with some positive impacts on persistence (Bernard et al., 2004). Social software and web conferencing tools offer new interaction affordances as well as new forms of collaboration. In addition, with such technology, students and instructors can become more directly visible to and socially present with each other.

### **BENEFITS OF SOCIAL MEDIA WHEN APPLIED TO ACADEMIC PRACTICES**

In recent years, the Web has been radically transformed, shifting from an information repository to a more social environment where users are not only passive receivers or active harvesters of information, but also creators of content, or “producers” (Bruns, 2008), that aim to facilitate :

- **Fosters communication and collaboration:** Blogging represents a growing activity among professionals and students who appreciate blogs for their mix of informal commentary, links to resources and personal touch. SNSs offer people opportunities to share life experiences, vent frustrations, offer reflections on social issues and express themselves in a non-threatening atmosphere. SNSs also enable community involvement in locating expertise, sharing content and collaborating to build content, and allow knowledge workers to extend the range and scope of their professional relationships
- **Social networking supports Research and Development (R&D).** Researchers create new knowledge while using existing knowledge. Their activities often take place in a social context made up of informal exchanges, brainstorming, idea exploration and cross-fertilization. Social networking allows researchers to draw from a social network of information and people outside of their traditional “circle of friends”.
- **Motivation and Learning Opportunities:** believes that classroom blogging has the potential to motivate students, to build online collaboration, and enhance learning opportunities. Literacy in the classroom may be promoted through the use of storytelling and dialogue. Clyde describes SNSs as educational tools because they allow students to develop ideas and invite feedback. Social networking helps teachers promote reflective analysis and the emergence of a learning community that goes beyond the school walls. Mazer et al found that participants who accessed the Facebook website of a teacher, who disclosed large amounts of information, anticipated higher levels of motivation and affective learning, indicating positive attitudes toward the course and the teacher. Teachers who personalize teaching through the use of humor, stories, enthusiasm, and self-disclosure not only are perceived by their students to be effective in explaining course content [40], but create a positive teaching atmosphere. Social networking also offers educators an
- **Learning Tool in Libraries.** Clyde believes that blogging in schools is an information-related activity that requires and develops information skills in students and should therefore be supported by school libraries. Social networking can be used by librarians to raise their visibility, augment or eliminate stereotypical images of librarians, increase research assistance traffic via Facebook message boxes and make library services and librarian assistance more convenient
- **Enables Educators to be Better Advisors.** Comments that students post on the site may provoke thoughtful conversation. SNSs may provide helpful information to educators and help them deal with certain situations better; one educator knew to go easy on a student when he saw his status change from “in a relationship” to “single”. Students may also feel more comfortable approaching educators who are present and friendly or who interact casually with them on Face book; it gives students the encouragement they need.
- **Digital Learning as a Substitution Process.** Online learning is a new social process that is beginning to act as a complete substitute for both distance learning and the traditional face to-face class. The believe that face-to-face courses, blended with online learning technologies and methodologies, are generally rated by students as significant improvements over face-to-face (only) classes.

### **COST OF SOCIAL MEDIA, WHEN APPLIED TO ACADEMIC PRACTICES**

Despite this scenario looks pretty interesting, there are some criticisms and concerns regarding the validity, trust and reliability of the content created by students in a social network .While many educators are enthusiastic about the potential of using social networking for educational purposes, others remain wary of its place in education claiming that social networking sites may disengage students from learning traditional skills and

literacies (Brabazon, 2007). Others fear privacy issues may negatively impact or even destroy the traditional roles of the teacher and learner (Sickler, 2007). Technologies place barriers between people, face-to-face meetings happen less. This small change yet leads to such a big issue for society in general. People choose to stay at home rather than going out, kids play more online games rather than hanging out with friends. This new invisible wall caused by technology deducts human's sense of pride in their country. It is possible that people will more likely to lose the ability to read body language. This could cause all sorts of misunderstanding and problems. Besides the good use of technologies, ethical use of social media is questioned. Students today are increasingly absorbing information from sources such as these, often more readily than from traditional curriculum, and their perception of the value, rule-sets, and content is being both shaped and reconstituted by new media. The challenges posed by new media to the traditional classroom are familiar to most instructors. (Carlson 2005; Bowman 2008). There are concerns about student privacy and reputation (Solove 2007). Plagiarism has become much easier to commit—and detect. Already, debates are brewing over whether students waste time on Facebook to the detriment of their studies (Karpinski 2009; Pasek et al. 2009a). Faced with an overload of information from a variety of partisan and non-partisan sources, they struggle to differentiate facts from propaganda, research from advocacy, and hard reportage from yellow journalism. They too often treat Wikipedia as the final, credible source, rather than as a jumping-off point for further inquiry. They are unclear on how to properly cite Internet sources, or what constitutes a valid source. Social networking can impact student productivity and work/life balance. Teachers and lecturers are often distressed by the lack of concentration and interest displayed by students who have constant access to these SNSs. Many organizations are concerned with managing productivity in more loosely structured network environments, especially in organizations where the nature of their work is not collaborative or their cultural environment does not recognize the importance of social interactions. Students post information that they do not necessarily want their professors to see. Students indicate that the student/faculty relationship should remain professional and should not be sociable. Teachers' own credibility might also be at stake depending on their profile content and their in/ability to control profile content. Mazer et al urge teachers to proceed with caution in their use of SNSs.

## CONCLUSION

We are all connected with our local communities and networks in certain ways, patterns, but with technology as media, and social media as “catalyst” and agents, we are now able to reach different corners of the world, beyond the traditional closed walls (schools, classes) or local groups or communities. The tyranny of space and time could also be overcome with such a collaborative approach which goes beyond through multiple agents, technology and tools, and most important of all, with a basis of openness, autonomy, diversity and connectedness (properties of networks) in order to strengthen the learning.

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**CONSTRUCTIVISM IN EDUCATION: A PARADIGM SHIFT FROM TEACHING TO LEARNING**

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**ABSTRACT**

*Constructivism is a theory of knowledge (epistemology) that contends that people create learning and importance from a cooperation between their encounters and their thoughts. Amid early stages, it is a collaboration between their encounters and their reflexes or standards of conduct. Piaget called these frameworks of information schemata. Constructivism is certainly not a particular instructional method, in spite of the fact that usually mistook for constructionism, an instructive hypothesis created by Seymour Papert, enlivened by constructivist and experiential learning thoughts of Jean Piaget. Piaget's hypothesis of constructivist learning has had boundless effect on learning speculations and showing strategies in instruction and is a fundamental topic of numerous training change developments. Research support for constructivist encouraging systems has been blended, with some examination supporting these strategies and other research repudiating those outcomes. This paper discussing the impact of Constructivism in education for transition of education systems from Teaching to Learning.*

*Keywords: Teaching, Learning, Education, Constructivism*

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**INTRODUCTION**

In past hundreds of years, constructivist thoughts were not generally esteemed because of the discernment that kids' play was viewed as heedless and of little significance. Jean Piaget did not concur with these customary perspectives, nonetheless. He considered play to be an imperative and vital piece of the understudy's intellectual improvement and gave logical confirmation to his perspectives. Today, constructivist speculations are compelling all through a significant part of the non-formal learning division. Educators who influenced constructivism include:

- John Dewey (1859–1952)
- Maria Montessori (1870–1952)
- Władysław Strzemiński (1893–1952)
- Jean Piaget (1896–1980)
- Lev Vygotsky (1896–1934)
- Heinz von Foerster (1911–2002)
- Jerome Bruner (1915-2016)
- Herbert Simon (1916–2001)
- Paul Watzlawick (1921–2007)
- Ernst von Glasersfeld (1917–2010)
- Edgar Morin (1921-)

**CONSTRUCTIVIST THEORY**

Formalization of the hypothesis of constructivism is for the most part credited to Jean Piaget, who verbalized instruments by which information is disguised by students. He proposed that through procedures of convenience and absorption, people develop new information from their encounters. At the point when people acclimatize, they consolidate the new experience into an effectively existing structure without changing that system. This may happen when people's encounters are lined up with their inner portrayals of the world, yet may likewise happen as an inability to change a flawed comprehension; for instance, they may not see occasions, may misjudge contribution from others, or may choose that an occasion is a fluke and is in this manner insignificant as data about the world. Conversely, when people's encounters negate their inward portrayals, they may change their view of the encounters to accommodate their inside portrayals. As per the hypothesis, convenience is the procedure of reframing one's psychological portrayal of the outer world to fit new encounters. Convenience can be comprehended as the system by which disappointment prompts realizing: when we follow up on the desire that the world works in a single manner and it damages our desires, we frequently flop, yet by pleasing this new

experience and reframing our model of the way the world works, we gain from the experience of disappointment, or others' disappointment.

Note that constructivism is certainly not a specific teaching method. Truth be told, constructivism is a hypothesis portraying how learning happens, paying little respect to whether students are utilizing their encounters to comprehend an address or following the directions for building a model plane. In the two cases, the hypothesis of constructivism recommends that students build learning out of their encounters. Notwithstanding, constructivism is frequently connected with educational methodologies that advance dynamic learning, or learning by doing.

### **CONSTRUCTIVIST LEARNING INTERVENTION**

Social constructivism sees every student as an interesting individual with one of a kind needs and foundations. The student is likewise observed as perplexing and multidimensional. Social constructivism not just recognizes the uniqueness and intricacy of the student, however really energizes, uses and rewards it as a necessary piece of the learning procedure. Social constructivism urges the student to touch base at his or her rendition of reality, affected by his or her experience, culture or installed perspective. Chronicled advancements and image frameworks, for example, dialect, rationale, and numerical frameworks, are acquired by the student as an individual from a specific culture and these are learned all through the student's life. This additionally focuses on the significance of the idea of the student's social association with proficient individuals from the general public. Without the social collaboration with other more educated individuals, it is difficult to secure social significance of critical image frameworks and figure out how to use them. Youthful kids build up their reasoning capacities by interfacing with other youngsters, grown-ups and the physical world. From the social constructivist perspective, it is along these lines vital to consider the foundation and culture of the student all through the learning procedure, as this foundation likewise shapes the information and truth that the student makes, finds and achieves in the learning procedure (Wertsch 1997).

Besides, it is contended that the obligation of learning ought to live progressively with the student (Glaserfeld, 1989). Social constructivism hence stresses the significance of the student being effectively engaged with the learning procedure, not at all like past instructive perspectives where the duty rested with the educator to educate and where the student played a latent, open part. Glaserfeld (1989) stressed that students develop their own comprehension and that they don't just mirror and reflect what they read. Students search for importance and will endeavour to discover normality and request in the occasions of the world even without full or finish data.

### **THE INSPIRATION FOR LEARNING**

Another vital suspicion with respect to the idea of the student concerns the level and wellspring of inspiration for learning. As indicated by Glaserfeld (1989) managing inspiration to learn is firmly subject to the student's trust in his or her potential for learning. These sentiments of capability and confidence in potential to take care of new issues, are gotten from direct understanding of dominance of issues previously and are significantly more ground-breaking than any outside affirmation and inspiration (Prawat and Floden 1994). This connections up with Vygotsky's "Zone of Proximal Development" (Vygotsky, 1978) where students are tested inside closeness to, yet somewhat over, their present level of improvement. By encountering the effective finishing of testing errands, students gain certainty and inspiration to set out on more mind boggling challenges.

### **EDUCATORS AS FACILITATORS**

As per the social constructivist approach, educators need to adjust to the part of facilitators and not instructors (Bauersfeld, 1995). Though an educator gives an instructional address that covers the topic, a facilitator encourages the student to get to his or her own comprehension of the substance. In the previous situation the student assumes an aloof part and in the last situation the student assumes a functioning part in the learning procedure. The accentuation in this way gets some distance from the teacher and the substance, and towards the student (Gamoran, Secada, and Marrett, 1998). This sensational difference in part infers that a facilitator needs to show an entirely unexpected arrangement of abilities than an educator (Brownstein 2001). An instructor tells, a facilitator asks; an educator addresses from the front, a facilitator underpins from the back; an educator gives answers as per a set educational programs, a facilitator gives rules and makes nature for the student to land at his or her own particular decisions; an instructor for the most part gives a monolog, a facilitator is in nonstop discourse with the students (Rhodes and Bellamy, 1999). A facilitator ought to likewise have the capacity to adjust the learning background 'in mid-air' by stepping up with regards to guide the learning knowledge to where the students need to make esteem.

The learning condition ought to likewise be intended to help and test the student's reasoning (Vesta, 1987). While it is pushed to give the student responsibility for issue and arrangement process, it isn't the situation that any action or any arrangement is sufficient. The basic objective is to help the student in turning into a viable scholar. This can be accomplished by accepting numerous parts, for example, advisor and mentor. A couple of methodologies for helpful learning incorporate:

- Reciprocal Questioning: understudies cooperate to ask and answer questions
- Jigsaw Classroom: understudies move toward becoming "specialists" on one a player in a gathering undertaking and show it to the others in their gathering
- Structured Controversies: Students cooperate to look into a specific debate (Woolfolk, 2010)

### **THE NATURE OF THE LEARNING PROCESS**

Social constructivism, firmly impacted by Vygotsky's (1978) work, proposes that information is first developed in a social setting and is then appropriated by people (Kauchak, 2004). As indicated by social constructivists, the way toward sharing individual viewpoints called synergistic elaboration (Meter and Stevens, 2000) results in students building seeing together that wouldn't be conceivable alone (Greeno et al., 1996)

Social constructivist researchers see learning as a functioning procedure where students should figure out how to find standards, ideas and realities for themselves, consequently the significance of empowering mystery and instinctive reasoning in students (Ackerman, 1996). Actually, for the social constructivist, the truth isn't something that we can find since it doesn't pre-exist preceding our social creation of it. Kukla (2000) contends that the truth is developed by our own particular exercises and that individuals, together as individuals from a general public, design the properties of the world.

Other constructivist researchers concur with this and accentuate that people make implications through the connections with each other and with nature they live in. Learning is in this way a result of people and is socially and socially built (Floden, 1994). McMahan (1997) concurs that learning is a social procedure. He additionally expresses that learning isn't a procedure that lone happens inside our psyches, nor is it an inactive improvement of our practices that is moulded by outside powers and that important learning happens when people are occupied with social exercises.

Vygotsky (1978) additionally featured the union of the social and viable components in learning by saying that the most huge minute over the span of scholarly improvement happens when discourse and reasonable action, two beforehand totally autonomous lines of advancement, unite. Through viable movement a tyke builds significance on an intrapersonal level, while discourse interfaces this importance with the relational world shared by the kid and her/his way of life.

### **DYNAMIC ASSOCIATION BETWEEN ASSIGNMENT, EDUCATOR AND STUDENT**

A further normal for the part of the facilitator in the social constructivist perspective, is that the teacher and the students are similarly associated with gaining from each other too (Holt, 2000). This implies the learning knowledge is both abstract and objective and necessitates that the educator's way of life, qualities and foundation turn into a fundamental piece of the interchange amongst students and errands in the forming of importance. Students contrast their variant of reality and that of the teacher and individual students to get to another, socially tried form of truth (Kukla, 2000). The undertaking or issue is consequently the interface between the teacher and the student (McMahan 1997). This makes a dynamic connection between undertaking, teacher and student. This involves students and educators ought to build up a consciousness of each other's perspectives and afterward look to their own particular convictions, gauges and qualities, along these lines being both abstract and target in the meantime (Savery, 1994).

A few examinations contend for the significance of coaching during the time spent learning (Archee and Duin 1995). The social constructivist display in this way underlines the significance of the connection between the understudy and the educator in the learning procedure. Some learning approaches that could harbour this intuitive learning incorporate equal educating, peer joint effort, psychological apprenticeship, issue based guideline, web missions, secured direction and different methodologies that include learning with others.

### **COORDINATED EFFORT AMONG STUDENTS**

Students with various abilities and foundations ought to team up in assignments and dialogs to touch base at a common comprehension of reality in a particular field (Duffy and Jonassen 1992). Most social constructivist models, for example, that proposed by Duffy and Jonassen (1992), likewise push the requirement for coordinated effort among students, in guide logical inconsistency to customary focused methodologies. One

Vygotskian thought that has noteworthy ramifications for peer coordinated effort, is that of the zone of proximal advancement. Characterized as the separation between the real formative level as controlled by free critical thinking and the level of potential improvement as decided through critical thinking under grown-up direction or as a team with more proficient associates, it varies from the settled organic nature of Piaget's phases of advancement. Through a procedure of 'platform' a student can be reached out past the confinements of physical development to the degree that the advancement procedure falls behind the learning procedure (Vygotsky, 1978).

### **LEARNING BY INSTRUCTING AS CONSTRUCTIVIST STRATEGY**

In the event that understudies need to present and prepare new substance with their cohorts, a non-straight procedure of aggregate learning development will be set up. The social constructivist worldview sees the setting in which the learning happens as key to the learning itself (McMahon 1997). Hidden the idea of the student as a functioning processor seems to be "the presumption that there is nobody set of summed up learning laws with every law applying to all areas" (Vesta 1987). Decontextualised learning does not give us the aptitudes to apply our understandings to bona fide undertakings in light of the fact that, as Duffy and Jonassen (1992) demonstrated, we are not working with the idea in the mind boggling condition and encountering the perplexing interrelationships in that condition that decide how and when the idea is utilized. One social constructivist idea is that of true or arranged realizing, where the understudy participates in exercises straightforwardly significant to the use of learning and that happen inside a culture like the connected setting (Brown et al. 1989). Psychological apprenticeship has been proposed as a viable constructivist model of discovering that endeavors to "enculturate understudies into true practices through movement and social connection in a route like that obvious, and clearly effective, in make apprenticeship" (Ackerman, 1996).

Holt and Willard-Holt (2000) accentuate the idea of dynamic evaluation, which is a method for surveying the genuine capability of students that varies fundamentally from ordinary tests. Here the basically intelligent nature of learning is reached out to the procedure of evaluation. As opposed to review evaluation as a procedure did by one individual, for example, a teacher, it is viewed as a two-way process including connection between both educator and student. The part of the assessor ends up one of going into discourse with the people being evaluated to discover their present level of execution on any assignment and imparting to them conceivable manners by which that execution may be enhanced an ensuing event. Along these lines, appraisal and learning are viewed as inseparably connected and not separate procedures.

As indicated by this perspective educators should consider evaluation to be a consistent and intelligent process that estimates the accomplishment of the student, the nature of the learning knowledge and courseware. The criticism made by the evaluation procedure fills in as an immediate establishment for facilitate advancement.

### **THE SELECTION, SCOPE, AND SEQUENCING OF THE SUBJECT MATTER**

Information ought not be separated into various subjects or compartments, but rather ought to be found as an incorporated entire (McMahon 1997; Vesta 1987). This likewise again underlines the significance of the setting in which learning is exhibited (Brown et al. 1989). The world, in which the student needs to work, does not approach one as various subjects, however as a mind boggling bunch of realities, issues, measurements, and observations (Ackerman 1996).

Students ought to always be tested with undertakings that allude to abilities and learning just past their present level of authority. This catches their inspiration and expands on past triumphs to upgrade student certainty (Brownstein, 2001). This is in accordance with Vygotsky's Zone of Proximal Development, which can be depicted as the separation between the genuine formative level and the level of potential advancement. Vygotsky (1978) additionally guaranteed that direction is great just when it continues in front of improvement. At that point it stirs and rouses to life a whole arrangement of capacities in the phase of developing, which lie in the Zone of Proximal Development. It is along these lines that direction assumes a critical part being developed.

To completely connect with and challenge the student, the undertaking and learning condition ought to mirror the intricacy of the condition that the student ought to have the capacity to work in toward the finish of learning. Students must not just have responsibility for learning or critical thinking process, yet of the issue itself (Derry, 1999).

Where the sequencing of topic is concerned, it is the constructivist perspective that the establishments of any subject might be instructed to anyone at any phase in some frame (Duffy and Jonassen 1992). This implies teachers should first present the fundamental thoughts that give life and frame to any theme or branch of knowledge, and after that return to and expand upon these over and over. This thought has been broadly utilized in educational module.

It is additionally vital for teachers to understand that in spite of the fact that an educational modules might be set down for them, it definitely winds up moulded by them into something individual that mirrors their own conviction frameworks, their contemplations and sentiments about both the substance of their direction and their students (Rhodes and Bellamy 1999). In this way, the learning background turns into a mutual undertaking. The feelings and life settings of those engaged with the learning procedure should in this way be considered as a basic piece of learning. The objective of the student is focal in considering what is found out (Ackerman 1996).

### **THE STRUCTURE OF THE LEARNING PROCEDURE**

It is imperative to accomplish the correct harmony between the level of structure and adaptability that is incorporated with the learning procedure. Savery (1994) battles that the more organized the learning condition, the harder it is for the students to build significance in view of their reasonable understandings. A facilitator should structure the learning knowledge sufficiently only to ensure that the understudies get clear direction and parameters inside which to accomplish the learning goals, yet the learning background ought to be open and sufficiently free to consider the students to find, appreciate, associate and touch base at their own, socially confirmed rendition of truth.

Constructivist thoughts have been utilized to advise grown-up instruction. Where instructional method applies to the training of youngsters, grown-ups teachers regularly talk rather than Andragogy. Techniques must assess contrasts in learning, because of the way that grown-ups have numerous more encounters and beforehand existing neurological structures.

Methodologies in light of constructivism stretch the significance of systems for common arranging, finding of student needs and premiums, helpful learning atmosphere, consecutive exercises for accomplishing the goals, detailing of learning targets in view of the analyzed needs and premiums. Individual importance of the substance, inclusion of the student simultaneously, and more profound comprehension of basic ideas are a portion of the convergences between accentuations in constructivism and grown-up learning standards.

### **TEACHING METHODS IN THE LIGHT OF CONSTRUCTIVISM**

Different methodologies in teaching method get from constructivist hypothesis. They for the most part propose that learning is proficient best utilizing a hands-on approach. Students learn by experimentation, and not by being told what will happen, and are left to make their own particular deductions, disclosures and ends.

### **RESEARCH SUPPORTING CONSTRUCTIVISM**

Hmelo-Silver, Duncan, and Chinn refer to a few investigations supporting the achievement of the constructivist issue based and request learning techniques. For instance, they portray a task called GenScope, a request based science programming application. Understudies utilizing the GenScope programming indicated huge increases over the control gatherings, with the biggest additions appeared in understudies from fundamental courses. Hmelo-Silver et al. additionally refer to a huge report by Geier on the adequacy of request based science for centre school understudies, as shown by their execution on high-stakes state sanctioned tests. The change was 14% for the primary partner of understudies and 13% for the second accomplice. This investigation additionally found that request based instructing strategies enormously decreased the accomplishment hole for African-American understudies.

Guthrie et al. (2004) looked at three instructional techniques for third-level perusing: a conventional approach, a procedures direction just approach, and an approach with methodologies guideline and constructivist inspiration systems including understudy decisions, cooperation, and hands-on exercises. The constructivist approach, called CORI (Concept-Oriented Reading Instruction), brought about better understudy perusing perception, subjective procedures, and inspiration.

Jong Suk Kim found that utilizing constructivist showing techniques for sixth graders brought about preferred understudy accomplishment over customary instructing strategies. This examination likewise found that understudies favoured constructivist techniques over conventional ones. In any case, Kim did not discover any distinction in understudy self-idea or learning techniques between those instructed by constructivist or conventional strategies.

Doğru and Kalender looked at science classrooms utilizing conventional educator focused ways to deal with those utilizing understudy focused, constructivist techniques. In their underlying trial of understudy execution quickly following the exercises, they found no huge contrast amongst customary and constructivist strategies. Nonetheless, in the subsequent evaluation 15 days after the fact, understudies who learned through constructivist techniques indicated preferred maintenance of information over the individuals who learned through customary strategies.

**CRITICISM OF EDUCATIONAL CONSTRUCTIVISM**

A few psychological clinicians and instructors have scrutinized the focal cases of constructivism. It is contended that constructivist hypotheses are deceiving or negate known discoveries. Matthews (1993) endeavours to outline the impact of constructivism in current arithmetic and science instruction, intending to show how unavoidable Aristotle's empiricist epistemology is inside it and what issues constructivism faces on that record.

In the neo-Piagetian speculations of subjective advancement it is kept up that learning at any age relies on the preparing and authentic assets accessible at this specific age. That is, it is kept up that if the prerequisites of the idea to be comprehended surpasses the accessible handling proficiency and working memory assets then the idea is by definition not learnable. Hence, anyway dynamic a kid is in a learning try, to take in the kid must work in a learning situation that meets the formative and individual learning limitations that are trademark for the kid's age and this present tyke's conceivable deviations from her age's standard. In the event that this condition isn't met, development gets sidetracked.

A few instructors have likewise scrutinized the adequacy of this approach toward instructional outline, particularly as it applies to the improvement of direction for amateurs (Clark, 2006). While a few constructivists contend that "learning by doing" upgrades learning, faultfinders of this instructional technique contend that little observational confirmation exists to help this announcement given beginner students (Mayer, 2004). Sweller and his partners contend that amateurs don't have the hidden mental models, or "patterns" fundamental for "learning by doing" (Sweller, 1988). Without a doubt, Mayer (2004) checked on the writing and found that fifty long periods of observational information don't bolster utilizing the constructivist showing method of unadulterated disclosure; in those circumstances requiring revelation, he contends for the utilization of guided disclosure.

Mayer (2004) contends that not all encouraging procedures in view of constructivism are productive or successful for all students, recommending numerous instructors twist constructivism to utilize instructing strategies that expect students to be typically dynamic. He depicts this improper utilization of constructivism as the "constructivist educating misrepresentation". "I allude to this understanding as the constructivist showing error since it compares dynamic learning with dynamic educating." (Mayer, 2004). Rather Mayer proposes students ought to be "intellectually dynamic" amid learning and that educators utilize "guided practice."

Interestingly, Kirschner, et al. (2006) depict constructivist showing techniques as "unguided strategies for direction." They recommend more organized learning exercises for students with practically zero earlier information. Slezak states that constructivism "is a case of in vogue however altogether hazardous regulations that can have little advantage for down to earth instructional method or instructor training."

Kirschner et al. likewise assemble various learning hypotheses together (Discovery, Problem-Based, Experiential, and Inquiry-Based adapting), dismissing the distinctions and real measure of structure and platform incorporated into the speculations. Hmelo-Silver, Duncan, and Chinn have expressed that very scaffolded constructivist training strategies like issue based learning and request learning are powerful, and the confirmation does not bolster Kirschner, Sweller, and Clark's decision. Hmelo-Silver et al. contend that Kirschner et al. "ignored" research positive to issue based learning. They incorporate into their reaction a 2003 meta-investigation indicating PBL has benefits for learning application over conventional educational programs.

Kirschner et al. (2006) portray worked cases as an instructional plan answer for procedural learning. Clark, Nguyen, and Sweller (2006) depict this as an extremely powerful, exactly approved technique for showing students procedural expertise securing. Confirmation for learning by contemplating worked-illustrations, is known as the worked-case impact and has been observed to be valuable in numerous areas, e.g. music, chess, sports; idea mapping; geometry; material science, arithmetic, or programming.

Kirschner et al. (2006) portray why they amass a progression of apparently dissimilar learning hypotheses (Discovery, Problem-Based, Experiential, and Inquiry-Based learning). The thinking for this gathering is on account of each learning hypothesis advances a similar constructivist showing procedure - "learning by doing." While they contend "learning by doing" is valuable for more educated students, they contend this constructivist training strategy isn't helpful for tenderfoots. Mayer expresses that it advances social movement too soon in the learning procedure, when students ought to be psychologically dynamic (Mayer, 2004). What's more, Sweller and his partners portray a continuum of direction, beginning with worked cases to gradually blur direction. This continuum of blurred direction has been tried exactly to deliver a progression of learning impacts: the worked-case impact (Sweller and Cooper, 1985), the direction blurring impact, and the skill inversion impact.

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**FEEDBACK OF REVELATION BASED INSTRUCTING PROCEDURES**

Following 50 years of backing related with guideline utilizing negligible direction, there shows up no group of research supporting the procedure. In so far as there is any proof from controlled examinations, it consistently bolsters immediate, solid instructional direction rather constructivist-based insignificant direction amid the guideline of amateur to transitional students. Notwithstanding for understudies with significant earlier information, solid direction while learning is frequently observed to be similarly powerful as unguided methodologies. Not exclusively is unguided guideline regularly less compelling; there is likewise confirm that it might have negative outcomes when understudy gain confusions or inadequate or disordered learning (Clark, 2006).

Mayer (2004) contends against disclosure based showing procedures and gives a broad survey to help this contention. Mayer's contentions are against unadulterated disclosure, and are not particularly gone for constructivism: "Nothing in this article ought to be translated as belligerence against the perspective of learning as information development or against utilizing hands-on request or gathering dialog that advances the procedure of information development in students."

Mayer's worry is the manner by which one applies revelation based educating procedures. He gives exact research as confirmation that revelation based encouraging methods are lacking. Here he refers to this writing and makes his point "For instance, an ongoing replication is look into demonstrating that understudies figure out how to wind up better at taking care of science issues when they ponder worked-out illustrations instead of when they exclusively participate in hands-on critical thinking (Sweller, 1999). The present defenders of revelation techniques, who claim to draw their help from constructivist reasoning, are making advances into instructive practice. However an impartial survey of the important research writing demonstrates that revelation based practice isn't as powerful as guided disclosure." (Mayer, 2004)

The examination by Kirschner et al. from which the statement toward the start of this area was taken has been broadly referred to and is essential for demonstrating the cut off points of insignificantly guided guideline. Hmelo-Silver et al. reacted, calling attention to that Kirschner et al. conflated constructivist showing methods, for example, request learning with "disclosure learning". This would concur with Mayer's perspective that despite the fact that constructivism as a hypothesis and training procedures consolidating direction are likely legitimate uses of this hypothesis, in any case a custom of misconception has prompted some inquiry "unadulterated revelation" methods.

**CONSTRUCTIVIST LEARNING ENVIRONMENTS**

Amid the 1990s, a few scholars started to ponder the psychological heap of tenderfoots amid critical thinking. Intellectual load hypothesis was connected in a few settings. In light of the consequences of their examination, these creators don't bolster enabling fledglings to collaborate with poorly organized learning conditions. Badly organized learning conditions depend on the student to find issue arrangements (Jonassen, 1997). Jonassen (1997) additionally proposed that beginners be educated with "very much organized" learning conditions.

Jonassen (1997) likewise proposed all around outlined, all around organized learning conditions give framework to critical thinking. Sweller (2003) and his partners even recommend all around organized learning conditions, similar to those given by worked cases, are not successful for those with more experience—this was later portrayed as the "aptitude inversion impact" (Kalyuga et al., 2003). Subjective load scholars recommend worked illustrations at first, with a steady presentation of critical thinking situations; this is depicted as the "direction blurring impact" (Staley, 2002; Sweller, 2003). At long last Mayer states: "In this way, the commitment of brain science is to help move instructive change endeavours from the fluffy and ineffective universe of instructive belief system to the sharp and profitable universe of hypothesis construct examine with respect to how individuals learn." (Mayer, 2004).

**PERPLEXITY AMONGST CONSTRUCTIVIST AND MATURATIONIST**

Numerous individuals mistake constructivist for maturationist sees. The constructivist stream "depends on the possibility that the rationalization or interactionist procedure of advancement and learning through the understudy's dynamic development ought to be encouraged and advanced by grown-ups" (Vries et al., 2002). Though, "The sentimental maturationist stream depends on the possibility that the understudy's normally happening improvement ought to be permitted to bloom without grown-up intercessions in a lenient situation" (Vries et al., 2002). At the end of the day, grown-ups assume a functioning part in managing learning in constructivism, while they are relied upon to enable kids to direct themselves in maturationism.

**SOCIAL CONSTRUCTIVISM**

In late decades, constructivist scholars have expanded the conventional spotlight on singular figuring out how to address community oriented and social measurements of learning. It is conceivable to see social constructivism as a uniting of parts of crafted by Piaget with that of Bruner and Vygotsky (Wood, 1998). The term Communal constructivism was produced by Leask and Younie (2001) through their examination on the European School Net task which showed the estimation of distributed learning i.e. public development of new information instead of social development of learning as portrayed by Vygotsky where there is a student to educator platform relationship. Bryn Holmes in 2001 connected this to understudy learning as portrayed in an early paper, "in this model, understudies won't just go through a course like water through a strainer however rather leave their own particular engraving in the learning procedure."

**CONCLUSION**

This paper deals the diverse constructivist strategies that can be embraced successfully in the education systems. This incorporates the customary and in addition present day strategies. By and large instructing techniques are the strategies received by the educator to execute the curricular materials to the students in a class. The reason for receiving every single techniques are obvious to instructive professionals. It is planned to make certain attractive difference in conduct through the exchange of educational modules. It is done in the classroom between the instructor and the students through a progression of arranged exercises performed by the educator in the classroom. Those arranged exercises are the strategies to convey the educational programs is the strategy for instructing. Techniques for educating make just an immediate impact on the students. An immediate impact is an impact of executing the curricular materials. It is the result of instructing by and large and educationally called by the term learning accomplishment. To this term learning accomplishment clinicians gave another more expansive clarification as change of conduct. In showing strategies the principle angles is a way or method to execute the substance. All approach of educating are adaptable. Whenever amid the improvement of a substance matter educators have the flexibility to change over starting with one strategy then onto the next. The reason for receiving every last strategy is obvious to instructive specialists. It is expected to make certain alluring difference in conduct through the exchange of Social Studies educational modules. It is done in the classroom between the educator and the students through a progression of arranged exercises performed by the instructor in the classroom.

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**HEDGE FUND: A LIMITED PARTNERSHIP - A BLESSING IN DISGUISE**

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**ABSTRACT**

*Hedge funds, including fund of funds, are unregistered private investment partnerships, funds or pools that may invest and trade in many different markets, strategies and instruments (including securities, non-securities and derivatives). This study aims at providing a deeper insight into hedge funds and their possible impacts on the Indian Capital Market and also analyzing various kind of risk and their overall performance. Analysis has been done by using a Quantitative Research. The inference was that the main advantages or impact of Hedge funds in India are that they bring in the much welcome volumes, and thus, liquidity in the market.*

*Keywords: Correlation Coefficient, Hedge Funds, Indian Capital Markets and Performance Analysis.*

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**INTRODUCTION**

A hedge fund can be defined as an actively managed, pooled investment vehicle that is open to only a limited group of investors and whose performance is measured in absolute return units. However, this simple definition excludes some hedge funds and includes some funds that are clearly not hedge funds. There is no simple and all-encompassing definition. The nomenclature "hedge fund" provides insight into its original definition. To "hedge" is to lower overall risk by taking on an asset position that offsets an existing source of risk. A hedge fund is a fund that can take both long and short positions, use arbitrage, buy and sell undervalued securities, trade options or bonds, and invest in almost any opportunity in any market where it foresees impressive gains at reduced risk. Hedge fund strategies vary enormously –a)many hedge against downturns in the markets – b)especially important today with volatility and anticipation of corrections in overheated stock markets. The primary aim of most hedge funds is to reduce volatility and risk while attempting to preserve capital and deliver positive returns under all market conditions. Hedge funds pool investors' money and invest the money in an effort to make a positive return. Hedge funds typically have more flexible investment strategies than, for example, mutual funds. Many hedge funds seek to profit in all kinds of markets by using leverage (in other words, borrowing to increase investment exposure as well as risk), short-selling and other speculative investment practices that are not often used by mutual funds. Hedge funds are not subject to some of the regulations that are designed to protect investors. Hedge funds, however, are subject to the same prohibitions against fraud as are other market participants, and their managers owe a fiduciary duty to the funds that they manage.

**LITERATURE REVIEW**

**1) Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors, The journal of wealth management, 2003. Authors: April Klein, Emanuel Zur**

In this it had been examined that recent confrontational activism campaigns by hedge funds and other private investors. The main parallels between the groups are a significantly positive market reaction for the target firm around the initial Schedule 13D filing date, significantly positive returns over the subsequent year, and the activist's high success rate in achieving its original objective. Further, both activists frequently gain board representation through real or threatened proxy solicitations. Two major differences are that hedge funds target more profitable firms than other activists, and hedge funds address cash flow agency costs whereas other private investors change the target's investment strategies.

**2) Risk-Adjusted Performance of Funds of Hedge Funds Using a Modified Sharpe Ratio, The journal of finance, 2009. Authors: Greg N. Gregoriou and Jean-Pierre Gueyie**

Many institutional investors use the traditional Sharpe ratio today to examine the risk-adjusted performance of funds of hedge funds (FOFs). However, this could pose problems due to the non-normal returns of this alternative asset class. A modified value at risk (VaR) and modified Sharpe ratio solves the problem and can provide a superior tool for correctly measuring risk-adjusted performance. In this article, the authors rank 30 funds of hedge funds according to the Sharpe and modified Sharpe ratio. Their results indicate that the modified Sharpe is lower and more accurate when examining non-normal returns

**3) Hedge funds, insiders, and the decoupling of economic and voting ownership: Empty voting and hidden (morphable) ownership, The journal of corporate finance, 2007. Authors: Henry T.C.Hu, Bernard Black**

Most U.S. public companies have a single class of voting common shares: voting power is proportional to economic ownership. Linking votes to shares is often thought to be desirable, because, as residual claimants,

shareholders have an incentive to exercise voting power well. The linkage also facilitates the market for corporate control. On the other hand, decoupling is efficient in some situations. Equity derivatives and other capital market developments now allow shareholders to readily decouple voting rights from economic ownership of shares, often without public disclosure. Hedge funds are prominent users of decoupling. Sometimes they hold more votes than economic ownership (a situation we term “empty voting”). Sometimes they hold undisclosed economic ownership without votes, but often with the de facto ability to acquire votes if needed (a situation we term “hidden (morphable) ownership”). This Article analyzes empty voting and hidden (morphable) ownership, which we term the “new vote buying.” We offer a framework for unpacking its functional elements and assess its potential benefits and costs.

### **OBJECTIVES OF THE STUDY**

**The main objectives of this dissertation are**

- To study the risk associated with Hedge Funds
- To empirically analyze hedge fund performance in India as well as in Asia.

### **RESEARCH METHODOLOGY**

This is an empirical study has been done to get an insight into the Hedge Funds and their investment strategies, its performance during the financial crisis and its recent evolution in India. The type of data collected is mainly secondary data. CAGR calculation is based on 10yrs data from year 2008 to 2107 with monthly data of each year

### **ANALYSIS AND INTERPRETATION**

#### **Hedge Funds’ Evolving Approach to Risk**

Hedge funds have increasingly strengthened their internal risk management protocols, for example

- Today, 79% of firms separate their risk manager and fund manager functions to ensure independent oversight.
- 84% of hedge funds now use off-the-shelf risk analytics that form part of the portfolio management or trading system – hedge funds are looking to a wider array of sources to model their portfolios and protect against risk of all types.
- Over 91% of hedge funds rely on a third-party risk management administrator for fund reporting and safe keeping to help boost investor confidence in these areas.
- 60% of larger hedge fund managers now have an employee (or employees) dedicated solely to risk management - many managers stated that before 2008 this role was not a separate function.
- Many funds have elevated risk officers and designated them with the position of Chief Risk Officer, placing them on par with other senior executive positions like the General Counsel and Chief Financial Officer.
- Better firm-wide consolidated risk reporting has become a top priority. In 2011, hedge funds spent more than \$2 billion on implementing risk systems and infrastructure.
- The financial crisis of 2008 provided managers with a new body of historical data to create relevant, authentic “what if” scenarios. As a result, risk systems now have more data available that includes numerous examples of highly volatile risk periods to inform strategies moving forward.

**PERFORMANCE OF HEDGE FUNDS IN INDIA AND ASIA:** Though Hedge funds seek absolute return strategies, but due to the herding mentality the returns are getting diminished. And some of the major debacles of Hedge funds like the AMARANTH Advisors LLC and LONG TERM CAPITAL MANAGEMENT LLC , forced the hedge funds to look into some greener pastures like Asia where the market is in premature stage. Hedge funds started investing in Asian markets after the Tech Bubble which forced many hedge funds to liquidate their net positions. The potential of Asian hedge funds is well supported by fundamentals. From an investment perspective, the volatility in the Asian markets in recent years has allowed long-short and other strategic players to outperform regional indices. The relative inefficiency of the regional markets also presents arbitrage opportunities from a demand stand point US and European investors are expected to turn to alternatives in Asia as capacity in their home markets diminish. Further, the improving economic climate in South East Asia should help foreign fund managers and investors to refocus their attention on the region. Overall, hedge funds look set to play a larger role in Asia. The top funds in the Asia Pacific region in 2017 could compete with hedge funds from around the world toe-to-toe. The best performer was the Alchemy India

Long-Term Fund from Alchemy Investment management. The fund managed to net a total return of 60.6%. In 2017 by focusing on equities in the world’s second most populous country.

**GROWTH OF HEDGE FUNDS IN INDIA**

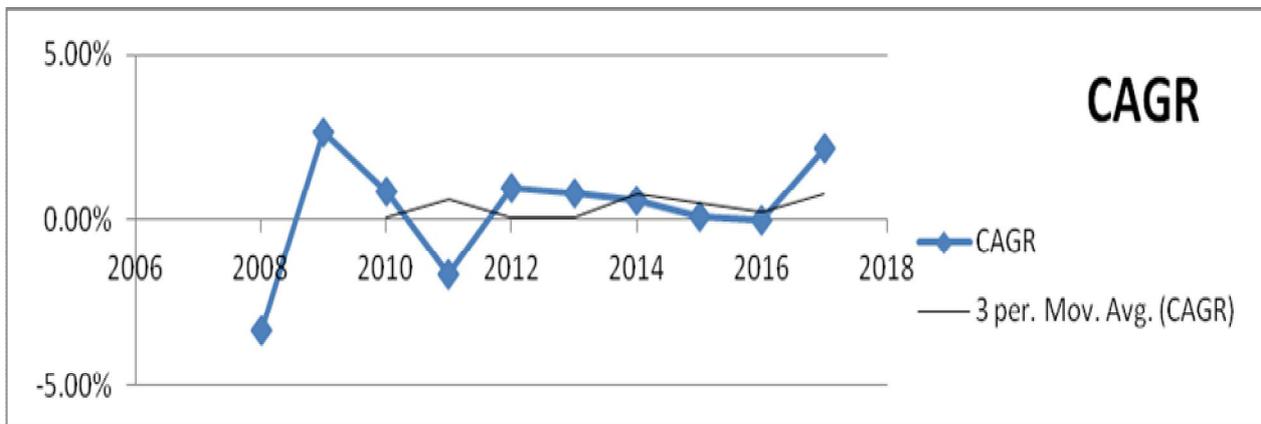
**Table-1: HFRI ASIAN EX JAPAN**

MONTHS	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
JAN	-7.68%	-1.33%	-2.53%	-2.09%	4.80%	4.45%	-1.29%	0.60%	-8.20%	3.41%
FEB	1.84%	-1.29%	-0.04%	-2%	4.76%	-0.40%	2.40%	1.19%	-1.58%	2.73%
MAR	-5.99%	3.95%	3.96%	2.36%	-2.34%	-0.80%	-0.63%	1.66%	6.77%	2.65%
APR	4.10%	6.52%	1.28%	2.59%	-0.64%	1.77%	-0.98%	8.37%	0.83%	1.52%
MAY	-1.01%	10.29%	-5.20%	-2.25%	-5.74%	1.64%	2.13%	1.40%	-0.13%	1.57%
JUNE	-6.13%	1.47%	-0.21%	-1.55%	0.55%	-5.85%	1.82%	-2.67%	0.89%	2.25%
JULY	-1.90%	5.56%	2.58%	1.54%	-0.11%	0.18%	2.57%	-5.42%	3.51%	2.92%
AUG	-4.16%	-0.96%	0.20%	-6.20%	0.12%	-1.32%	1.12%	-6.77%	2.27%	1.33%
SEPT	-8.38%	4.12%	6.63%	-9.45%	4.38%	4.31%	-1.26%	-0.53%	0.71%	1.15%
OCT	-11.02%	0.32%	2.95%	5.13%	0.56%	4.58%	0.73%	4.45%	-0.55%	3.01%
NOV	-1.70%	2.21%	-0.81%	-4.99%	2.18%	1.65%	0.68%	-0.36%	-1.87%	1.18%
DEC	3.25%	2.09%	2.04%	-1.92%	3.93%	0.29%	0.17%	0.45%	-1.89%	2.25%
CAGR	-3.34%	2.69%	0.86%	-1.65%	0.99%	0.83%	0.61%	0.12%	0.00%	2.16%

Source: Hedge Fund Research Inc.

CAGR in the table 3.5.A represents compound annual growth rate of return which is calculated using the following formula:

$$CAGR = \{(1+r_1)*(1+r_2)*(1+r_3)*.....*(1+r_n)\}^{(1/n)} - 1$$



**Analysis:** In the CAGR graph, we observe that the growth in 2008 was the lowest due the year of the biggest financial crisis. However there was a sharp increase in growth during 2009. Also there was dip in the CAGR during 2011 due Greek Crisis. Again we see a steep fall in CAGR during 2015-16 due to Chinese Stock Crisis. The growth has been quite volatile across years but recent period is a phase of exceptional growth due to investment made by such funds in cryptocurrency. The volatility of such growth rate is due to different bizarre strategies adopted by hedge funds. From the above CAGR<sub>s</sub>, we can calculate the total CAGR from 2008 to 2017 to determine the total growth of hedge funds in India.

$$\text{Total Growth} = \{(1-0.0334)*(1+0.0269)*(1+0.0086)*(1-0.0165)*(1+0.0099)*(1+0.0083)*(1+0.0061)*(1+0.0012)*1*(1+0.0216)\}^{(1/10)} - 1$$

$$\therefore \text{Total Growth} = 0.31316396\%$$

Though the total growth across years is comparatively low, however the growth rate is positive which might be a good picture. Asia being on a stage of expansion with the largest number of emerging countries and fastest growing countries shall experience much higher growth in near future.

**CONTRIBUTION OF ASIAN HEDGE FUNDS IN OVERALL GLOBAL HEDGE FUNDS:** In order to study the overall contribution of Indian hedge funds, we shall regress returns of Global Hedge Funds against Asian Hedge Fund.

**Table-2: Regression of Global Hedge Funds Returns against Asian Hedge Funds Returns**

Month	Asia	World
Jan-17	3.41%	0.54%
Feb-17	2.73%	0.80%
Mar-17	2.65%	0.02%
Apr-17	1.52%	0.38%
May-17	1.57%	0.28%
Jun-17	2.25%	-0.19%
Jul-17	2.92%	0.86%
Aug-17	1.33%	0.67%
Sep-17	1.15%	-0.20%
Oct-17	3.01%	1.38%
Nov-17	1.18%	0.09%
Dec-17	2.25%	0.90%

**Analysis:** From the above regression we can derive the following equation:

$$\text{Returns}_{\text{World}} = 0.146366353 \text{ Returns}_{\text{Asia}} + \text{error term}$$

In order to analyse the above regression results, we need to first analyse whether this regression is valid

Validity of Coefficient: Coefficient is valid as p-value i.e. 0.1501% < 2.5%

Validity of entire regression

F Statistic= 17.58738, F Critical= 4.8443 (from F Table at 0.05)

F Statistic > F Critical. Thus the entire regression is valid

R Square indicates coefficient of determination i.e. how much of returns of Global Hedge Funds can be determined by returns of Asian Hedge Funds. In our context, its nothing but contribution of returns of Asian Hedge Funds to returns of Global Hedge Funds which is about 61.52% which is quite high.

If Asian Hedge Funds Returns changes by 1%, then Global Hedge Funds Returns shall change by 0.223949291 %.

### PERFORMANCES OF HEDGE FUND IN INDIA

In 2014, the average Indian hedge funds was up to 39.36%, outperforming the underlying markets by almost 10%. Managers running long or short equity strategies emerged as the clear winner posting gains of 54.83% - their best performance in the last 8 years. In terms of asset growth, Indian hedge fund asset under management (AUM) are currently at a seven year high of US\$3.45 billion, though roughly 36% below their 2007 peak of US\$5.36 billion. The average Indian hedge fund was down 50.66% during the 2008 financial crisis, witnessing steep performance-based losses and investor's redemption from which the hedge fund industry is yet to recover.

Since 2009, Indian managers have posted an eight year annualized return of 10.89%, and barring 2011, their AUM continues to trend upwards albeit at slower pace compared to the broader Asian hedge fund space.

**GROWTH OF HEDGE FUNDS IN INDIA:** In order to understand growth in the Indian Hedge funds we shall use HFRIIND index and determine the Compound Annual Growth Rate for each subsequent years and run a trend analysis.

**Table-3: HFRI Emerging Markets: India Index (HFRIIND)**

MONTH	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
JAN	-13.54%	-3.77%	-3.29%	-7.84%	12.20%	2.57%	-2.68%	5.67%	-8.63%	4.40%
FEB	-3.93%	-5.14%	-0.89%	-2.95%	5.10%	-7.47%	2.79%	1.70%	-9.03%	4.64%
MAR	-13.23%	5.53%	7.34%	4.13%	-2.24%	-1.01%	8.62%	-3.18%	11.65%	5.33%
APR	7.11%	9.19%	3.73%	1.47%	-4.07%	4.72%	2.13%	-3.54%	2.73%	4.01%
MAY	-6.08%	27.16%	-6.64%	-3.80%	-9.90%	-2.57%	12.58%	1.80%	0.85%	0.57%
JUNE	-11.75%	-0.86%	2.70%	-0.76%	3.69%	-7.23%	5.64%	-2.05%	2.94%	0.42%
JULY	0.68%	4.90%	3%	1.68%	1.05%	-3.94%	0.20%	5.11%	4.55%	3.49%
AUG	-2.85%	1.68%	1.23%	-11.81%	-0.03%	-12.51%	1.96%	-5.76%	1.56%	0.52%
SEPT	-12.99%	6.26%	7.37%	-9.18%	11.31%	10.49%	1.63%	1.25%	1.14%	-1.96%

OCT	-17.36%	-3.08%	2.03%	3.25%	-2.18%	8.88%	2.92%	2%	2.59%	3.66%
NOV	-6.65%	4.15%	-4.82%	-11.26%	4.60%	-0.03%	1.05%	0.59%	-7.60%	2.18%
DEC	3.46%	2.97%	3.89%	-5.04%	0.92%	3.88%	0.16%	1.40%	-0.83%	5.03%
CAGR	-6.71%	3.79%	1.21%	-3.66%	1.53%	-0.57%	3.01%	0.36%	-0.01%	2.67%

Source: Hedge Fund Research Inc.

CAGR in the table 3.5.A represents compound annual growth rate of return which is calculated using the following formula:

$$CAGR = \{(1+r_1)*(1+r_2)*(1+r_3)*.....*(1+r_n)\}^{(1/n)} - 1$$



**Analysis:** In the CAGR graph, we observe that the growth in 2008 was the lowest due to the year of immediate implementation and also the year of the biggest financial crisis. However there was a sharp increase in growth during 2009. The growth has been quite volatile across years but recent period is a phase of supernatural growth due to investment made by such funds in cryptocurrency. The volatility of such growth rate is due to different bizarre strategies adopted by hedge funds. From the above CAGR<sub>s</sub>, we can calculate the total CAGR from 2008 to 2017 to determine the total growth of hedge funds in India.

$$\text{Total Growth} = \{(1-0.0671)*(1+0.0379)*(1+0.0121)*(1-0.0366)*(1+0.0153)*(1-0.0057)*(1+0.0301)*(1+0.0036)*(1-0.0001)*(1+0.0267)\}^{(1/10)} - 1$$

∴ Total Growth= 0.11456548%

Though the total growth across years is comparatively low, however the growth rate is positive which might be a good picture. India being on a stage of expansion shall experience much higher growth in near future.

**CONTRIBUTION OF INDIAN HEDGE FUNDS IN ASIAN HEDGE FUNDS AND OVERALL GLOBAL HEDGE FUNDS**

In order to study the overall contribution of Indian hedge funds, we shall regress-

- Returns of Asian Hedge Funds against Indian Hedge Fund,
- Returns of Global Hedge Funds against Indian Hedge Fund.

**Table-4: Regression of Asian Hedge Funds Returns against Indian Hedge Funds Returns**

Month	Asia	India
Jan-17	3.41%	4.40%
Feb-17	2.73%	4.64%
Mar-17	2.65%	5.33%
Apr-17	1.52%	4.01%
May-17	1.57%	0.57%
Jun-17	2.25%	0.42%
Jul-17	2.92%	3.49%
Aug-17	1.33%	0.52%
Sep-17	1.15%	-1.96%
Oct-17	3.01%	3.66%
Nov-17	1.18%	2.18%
Dec-17	2.25%	5.03%

**Analysis:** From the above regression we can derive the following equation

$$\text{Returns}_{\text{Asia}} = 0.57179773 \text{ Returns}_{\text{India}} + \text{error term}$$

In order to analyse the above regression results, we need to first analyse whether this regression is valid

Validity of Coefficient

Coefficient is valid as p-value i.e. 0.0116% < 2.5%

Validity of entire regression

F Statistic= 33.8694

F Critical= 4.8443 (from F Table at 0.05)

F Statistic > F Critical

∴ the entire regression is valid

R Square indicates coefficient of determination i.e. how much of returns of Asian Hedge Funds can be determined by returns of Indian Hedge Funds. In our context, its nothing but contribution of returns of Indian Hedge Funds to returns of Asian Hedge Funds which is about 75.48% which is quite high.

If Indian Hedge Funds Returns changes by 1%, then Asian Hedge Funds Returns shall change by 0.57179773%.

**Table-5: Regression of Global Hedge Funds Returns against Indian Hedge Funds Returns**

Month	India	World
Jan-17	4.40%	0.54%
Feb-17	4.64%	0.80%
Mar-17	5.33%	0.02%
Apr-17	4.01%	0.38%
May-17	0.57%	0.28%
Jun-17	0.42%	-0.19%
Jul-17	3.49%	0.86%
Aug-17	0.52%	0.67%
Sep-17	-1.96%	-0.20%
Oct-17	3.66%	1.38%
Nov-17	2.18%	0.09%
Dec-17	5.03%	0.90%

**Analysis:** From the above regression we can derive the following equation:

$$\text{Returns}_{\text{World}} = 0.146366353 \text{ Returns}_{\text{India}} + \text{error term}$$

In order to analyse the above regression results, we need to first analyse whether this regression is valid

Validity of Coefficient :Coefficient is valid as p-value i.e. 0.1702% < 2.5%

Validity of entire regression

F Statistic= 16.96933

F Critical= 4.8443 (from F Table at 0.05)

F Statistic > F Critical. Thus the entire regression is valid

R Square indicates coefficient of determination i.e. how much of returns of Global Hedge Funds can be determined by returns of Indian Hedge Funds. In our context, its nothing but contribution of returns of Indian Hedge Funds to returns of Global Hedge Funds which is about 60.71% which is quite high.

If Indian Hedge Funds Returns changes by 1%, then Global Hedge Funds Returns shall change by 0.146366353 %.

**CONCLUSION**

Hedge funds as a whole are becoming an important segment of the asset management industry and gaining popularity from investors particularly from the high net worth investors, universities, charitable funds, endowments, pension funds, insurance and other institutional investors. Intentional herd induction goes counter to the casual observation that hedge funds could always reveal trades so as to encourage herding, but hardly

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ever do. Available empirical event–studies have not found evidence of such triggered herding. Though Hedge funds investments have a direct bearing to the culmination of some of the worst crisis in the world, they bring with them a lot of advantages too. If SEBI considers allowing Hedge Funds to directly invest in Indian markets it should bring in some regulations. Also the fact of current account convertibility should be taken into account, because if Hedge Funds are freely allowed into Indian Capital markets, there is also a possibility of free flight of money outwards thus created mayhem in the markets as well in the whole Economy.

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**EXAMINING THE EFFECTS OF LAYOFFS ON THE SURVIVING EMPLOYEES**

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**ABSTRACT**

*The study aims to examine the effects of layoffs on the surviving employees in the organization. It is a descriptive study. The data has been collected with the help of a structured questionnaire. The questionnaire was designed on the parameters: stress, health problems, emotional impact, leisure impact, impact on their children and interpersonal relations. The sample size of the study was 70. The study concludes that the layoffs create adverse effects on the psychological well being of the employee, which leads to stress, health problems, reduction in entertainment level. It is seen that due to layoffs the interpersonal relations also get effected to some extent. It is also seen that stress is the main factor which is correlated with almost all the parameters and the major outcome of the layoffs is the stress which is responsible for the further problems that an employee faces during this period of time.*

*Keywords: emotional, health, interpersonal, leisure, layoffs, psychological, stress, termination*

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**INTRODUCTION**

Layoff is the temporary suspension or permanent termination of employment of an employee or (more commonly) a group of employees for business reasons, such as the decision that certain positions are no longer necessary or a business slow-down or interruption in work. Layoffs can be perceived as a violation of the psychological contract between an organization and its employees, resulting in decreased trust and greater stress in the workplace. The negative effects on the survivors of a layoff — decreased commitment and productivity — are more costly for high-involvement workplaces, as these workplaces rely expressly on employee involvement and motivation. Not only are top-performing employees more likely to leave, but the employees that remain may exhibit less effort and involvement. Fortunately, these workplaces can mitigate the negative aftereffects of downsizing, the study found, by continuing their employee-friendly practices.

Many organizations resort to layoffs during periods of financial strain in obvious attempts to reduce personnel costs. In recent years, we have seen extensive layoffs in various industrial sectors. These layoffs have had an economic impact and a psychological impact on the individuals who were laid-off as well as their families. Several psychological perspectives offer some insight into the effects of layoffs on survivors. For example, layoffs may elicit anxiety produced by job insecurity that may in turn influence the performance of survivors. Indeed, the relationship between anxiety and performance has long been a topic of interest to experimental psychologists.

If the factors that influence survivors' reactions can be identified, then managers would be able to make more informed decisions about how to handle layoffs. Many of the determinants of survivors' reactions are factors that managers can influence. If the layoffs are mismanaged, thereby hampering survivors' productivity and morale, then the organization stands to lose a sizeable portion of the savings it hoped to achieve by introducing layoffs. Consequently, it is incumbent upon executives of a downsizing organization to plan and implement layoffs with special attention devoted to their impact on those who remain.

**INTRODUCTION TO PARAMETERS**

**Stress:** Stress is one effect that is seen in any of the jobs and even in the people who are not working. Stress has become a part of life now. But when the layoffs occur and the existing employees see their peers being laid off and have lost their earning. The surviving employees also feel tensed seeing this and it keeps on coming in their mind that they may be the next one to be laid off in the next round of layoffs. Stress includes the situations like not getting sound sleeps, doing things in a hurry etc.

**Health problems:** The employees seeing the layoff scenario and seeing their coworkers and peers tensed and in bad situation may get prone to health problems like severe headaches, blood pressure. They may indulge in consuming alcohol.

**Emotional Impact:** Emotions are a part of any human being. They express the current feeling of a person. The person feel abandoned and rejected. The mixed emotions that surface after layoffs typically range from losing self control to jealousy to guilt to anger – much the same as what is experienced at the time of job loss. The emotional consequences can be significant and difficult to address if not taken seriously and proactively.

**Leisure Impact:** As a person is in the situation worrying about his/her job security. His mind does not see anything at this time other than performance and work. His/her main focus remains on how to save his job. Usually at this time of situation a person forgets that life is not merely about just doing work but it needs to have the leisure otherwise the life becomes dull.

**Impact on their children:** Seeing their parents going through the hard face of life and depressed. The children also are affected in the same way. The work stress and the problems they face, they transmit on their children in the form of scolding etc. They are not able to give proper attention to their children as they used to give before. Also sometimes as they have fear of job loss in the future they compromise on reducing their children's activities so as to save money at this time.

**Interpersonal Relations:** When one has got fear in his mind, the interpersonal relations start getting effecting. One gets into conflicting situations very often and also gets frustrated. He keeps worrying about his work and no relations are taken care of; be it relatives or friends. He doesn't show any kind of responsibility in maintaining these relationships.

### **LITERATURE REVIEW**

Ost et al. (2018) layoff prompts a significant decrease in the likelihood of work while in school, however it has little effect on enlistment choices at the broad edge. On the escalated edge, layoff prompts an expansion in enlisted credits, steady with the way that the open door cost of school has diminished.

Handwerker & Mason (2018) Long-term examples of work, normal wages, and conclusion probabilities when mass layoffs change by the purpose behind layoffs, the industry of managers, business age, and the period in which the layoff occurred. Managers with mass layoffs amid the colossal subsidence and the recuperation that has taken after have milder examples of work levels and conclusion probabilities than businesses with layoffs in past periods.

Eppel et al. (2017) Transitory layoffs negatively affect coordination into work past the separate work environment. This is the situation for both genders and an extensive number of businesses. The specialists concerned are not accepting any higher wages keeping in mind the end goal to adjust for the wage misfortune amid the layoff and to give a budgetary motivating force to sit tight for a review.

Edler & Hense (2015) Workers lose salary because of joblessness and never recuperate the wage they could have picked up on the off chance that they had not have been expelled. By the by, workers likewise gain focal points through reviews, since they get higher post-reemployment compensation than representatives who moved to another business. This is on account of previous bosses give higher profits for residency and accreditations for individuals who sit tight for a review. Interestingly, representatives who were rejected and reemployed in another firm endure higher here and now wage misfortunes than reviewed representatives, however can increase long haul wage benefits by expanding comes back to work involvement.

Reissman et al. (1999) Wretchedness, in spite of the fact that a critical wellbeing result variable in its own particular right, is dealt with here as a type of mental misery which may encourage or worsen different wellbeing conditions.

Feuerstein et al. (1999) in like manner noticed that forecasts of prosperity are upgraded by including both business related and singular level psychosocial status factors. Various specialists have perceived the significance of misery in foreseeing self-detailed physical wellbeing.

Grunberg (1998) Expanded liquor utilization as a reaction to work trouble has been sensibly upheld in the writing, in any event as it shows itself among those specialists who buy in to a dreamer model of drinking.

Worrall & Cooper (1997) The center examination was led in a power supply organization yet these discoveries have been supplemented by a progression of related investigations directed in both open and private segment associations and, specifically, by a multi year inquire about program being led in the UK to evaluate the effect of hierarchical change on directors' recognitions and work encounters.

Noer (1993) depicted what he calls 'survivor ailment', embodying sentiments of dread, nervousness, wretchedness, coerce, a feeling of misfortune and outrage. As far as practices, he perceived a propensity to evade dangers and preventiveness among survivors. Similarly as with past investigations, he trusted that these responses are affected by the level of foul play they see all the while and the degree to which the business/mental contract is evolving. Sutton & D'Aunno (1989) suggest that stress can be a significant outcome of layoffs combined with feelings of threat and worry and that survivors can become 'frozen' by stress and uncertainty.

**RESEARCH METHODOLOGY**

**Objectives**

- To study the psychological impact of layoffs on the surviving employees.
- To study the relationship between stress, health problems, emotional impact, leisure impact, impact on children and interpersonal relations.
- To give recommendations to how this adverse impact on employees can be reduced.

**Research design:** It is a descriptive study involving survey conducted on employees. The data has been collected with the help of a designed questionnaire. The questionnaire was designed on the parameters: stress, health problems, emotional impact, leisure impact, impact on their children and interpersonal relations. The sample size of the study is 70 comprising of low and the middle level employees. Each of the above parameters contains subscales consisting of 4-8 questions that are rated on a five pointer likert scale. Respondents were asked to rate their responses on each question by checking that they Strongly Agree -1, Agree -2, No opinion -3, Disagree -4, Strongly Disagree -5.

**DATA ANALYSIS AND INTERPRETATIONS**

**Table-1: Mean and standard deviation for six parameters studied**

	<b>Totalstr</b>	<b>TotalHp</b>	<b>TotalEi</b>	<b>TotalLi</b>	<b>TotalIC</b>	<b>totalIR</b>
Mean	1.90	1.79	1.90	2.71	3.20	2.08
Std. Deviation	.690	.653	.748	1.047	1.151	.806

**Interpretations:** The mean of the parameter; Totalstr is 1.90 which means most of the employees agree that layoffs result in stress in their lives. The mean of the parameter; TotalHp is 1.79 which means that most of the employees agree that layoffs produce a great amount of health problems. The mean for the parameter; TotalEi is 1.90 which means most of the responses given were between 1 and 2 which shows that most of the employees agree that layoffs have an emotional impact. The mean for the parameter; TotalLi is 2.71 which mean that most of the employees’ responses are between 2 and 3 and very less employees agree that layoffs have a strong impact on their leisure activities. The mean for the parameter; TotalIC is 3.20. Most of the employees have different views on this factor and that the responses of the employees lie between 3 and 4. The mean for the parameter; TotalIR is 2.08 that mean most of the employees agree to it that layoffs are creating a great impact on their interpersonal relations. They agree that they often land up in conflicting situations and get frustrated very easily and are not able to give time to their relationships.

**Total stress (totalstr)**

**Table-2: Descriptive statistics for total stress**

		<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	strongly agree	28.0	28.0
	agree	55.0	83.0
	No opinion	16.1	99.1
	Disagree	.7	99.8
	Strongly disagree	.2	100.0
	Total	100.0	

**Interpretations:** About 55% of the employees agree to it that layoffs result in the stressful situations and 28% of the employees strongly agree to it. They experience fatigue in their body.

**Total health problems (totalhp)**

**Table-3: Descriptive statistics for total health problems**

		<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	strongly agree	33.4	33.4
	agree	55.4	88.9
	No opinion	10.3	99.1
	Disagree	.9	100.0
	Total	100.0	

Missing	System		
Total			

**Interpretations:** About 55.4% of the people agree to that layoffs produce a great amount of health problems and about 33% strongly agree to it. The employees feel that they usually get headaches, cold very often as the pressure on the work has increased due to layoffs. They have started consuming alcohol on a routine basis to relieve from the stressful situations. Due to the tensions they sweat a lot.

**Total emotional impact (totalei)**

**Table-4: Descriptive statistics for total emotional impact**

		Valid Percent	Cumulative Percent
Valid	strongly agree	31.4	31.4
	agree	49.1	80.6
	No opinion	17.4	98.0
	Disagree	2.0	100.0
	Total	100.0	
Missing	System		
Total			

**Interpretations:** About 31% of the employees are in strong agreement that layoffs have an emotional impact in their lives. The employees feel that they have become short tempered; they have started feeling jealous of others. They usually lose their self control. Some of them even feel lonely as their friends who were their coworkers have been laid off.

**Total leisure impact (totalli)**

**Table-5: Descriptive statistics for total leisure impact**

		Valid Percent	Cumulative Percent
Valid	strongly agree	9.6	9.6
	agree	39.6	49.3
	No opinion	25.4	74.6
	Disagree	20.7	95.4
	Strongly disagree	4.6	100.0
	Total	100.0	
Missing	System		
Total			

**Interpretations:** Around 10% of the employees strongly agree to the fact that layoffs have a strong impact on their leisure activities but around 40% of the employees agree to it that it has created an impact and have affected their leisure activities. Around 5% of the employees even feel that it has not created an impact and in the stressful situations also they have not reduced their travelling or visiting to their relatives.

**Total impact on their children (totalic)**

**Table-6: Descriptive statistics for total impact on employees' children**

		Valid Percent	Cumulative Percent
Valid	strongly agree	7.9	7.9
	agree	22.5	30.4
	No opinion	22.9	53.2
	Disagree	35.0	88.2
	Strongly disagree	11.8	100.0
	Total	100.0	
Missing	System		
Total			

**Interpretations:** Around 35% of the employees disagree to the fact that layoffs create a negative impact on their children. Most of them think that they give the same amount of childcare as they used to give before. They think that they would not compromise on their extra curricular activities and would not scold them as they are not responsible for this condition. They think that the condition has not so worsened that they should shift their children to the government school.

**Total interpersonal relations (totalir)**

**Table-7: Descriptive statistics for total interpersonal relations**

		Valid Percent	Cumulative Percent
Valid	strongly agree	22.1	22.1
	agree	53.9	76.1
	No opinion	19.3	95.4
	Disagree	3.6	98.9
	Strongly disagree	1.1	100.0
	Total	100.0	
Missing	System		
Total			

**Interpretations:** Around 53% of the employees agree that layoffs have an impact on their interpersonal relations and around 22% of the employees strongly agree to this.

**INTRA CORRELATION**

**Stress**

**Table-8: Intra correlations for stress**

		Str1	Str2	Str3	Str4	Str5	Str6	Str7	Str8
Str1	Pearson Correlation	1	-.011	.056	.078	.067	-.002	-.023	-.073
	Sig. (1-tailed)		.465	.324	.260	.292	.492	.425	.274
Str2	Pearson Correlation		1	.088	-.008	-.072	.043	.102	-.197
	Sig. (1-tailed)			.235	.475	.278	.361	.200	.051
Str3	Pearson Correlation			1	.302**	-.062	-.093	.000	.004
	Sig. (1-tailed)				.005	.306	.222	.498	.487
Str4	Pearson Correlation				1	-.208*	.010	.171	.041
	Sig. (1-tailed)					.042	.468	.078	.368
Str5	Pearson Correlation					1	-.107	.065	-.275*
	Sig. (1-tailed)						.190	.297	.011
Str6	Pearson Correlation						1	-.171	.120
	Sig. (1-tailed)							.078	.162
Str7	Pearson Correlation							1	-.037
	Sig. (1-tailed)								.382
Str8	Pearson Correlation								1
	Sig. (1-tailed)								
**. Correlation is significant at the 0.01 level (1-tailed).									
*. Correlation is significant at the 0.05 level (1-tailed).									

Str3 = I don't get good night sleeps without worrying about my work

Str4 = I feel worthless sometimes

**Interpretations:** Str3 is significant and has a positive correlation with the Str4 variable i.e 0.302 which means both Str3 and Str4 are directly correlated with each other. It means that when employees think they are not able to cope up with the current situation and feel worthless. It results in disturbing sleeps during the nights as their mind is not in a peace mode and is continuously thinking about the work.

**Health problems**

**Table-9: Intra correlations for health problems**

		<b>Hp1</b>	<b>Hp2</b>	<b>Hp3</b>	<b>Hp4</b>	<b>Hp5</b>
Hp1	Pearson Correlation	1	-.169	.031	.079	-.016
	Sig. (1-tailed)		.081	.398	.257	.449
Hp2	Pearson Correlation		1	.117	-.031	-.279**
	Sig. (1-tailed)			.168	.399	.010
Hp3	Pearson Correlation			1	.434**	-.038
	Sig. (1-tailed)				.057	.376
Hp4	Pearson Correlation				1	.089
	Sig. (1-tailed)					.231
Hp5	Pearson Correlation					1
	Sig. (1-tailed)					
** . Correlation is significant at the 0.01 level (1-tailed).						

Hp3 = I get headache almost everyday

Hp4 = I drink alcohol everyday.

Interpretations: Hp3 and Hp4 are significant and it is also seen that they have a positive correlation (0.434) between the two. Hp3 and Hp4 are directly related to each other. It is interpreted that as one consumes more alcohol, more headache problems the person is going to have.

**Leisure impact**

**Table-10: Intra correlations for leisure impact**

		<b>LI1</b>	<b>LI2</b>	<b>LI3</b>	<b>LI4</b>
LI1	Pearson Correlation	1	.068	.416**	.032
	Sig. (1-tailed)		.289	.000	.397
LI2	Pearson Correlation		1	.069	.188
	Sig. (1-tailed)			.285	.060
LI3	Pearson Correlation			1	.129
	Sig. (1-tailed)				.144
LI4	Pearson Correlation				1
	Sig. (1-tailed)				
** . Correlation is significant at the 0.01 level (1-tailed).					

LI1 = I have reduced my time for entertainment.

LI3 = I have reduced my visit to relatives.

Interpretations: LI1 and LI3 are significant and they have the positive correlation (0.416) between each other. It means that LI1 and LI3 have a direct relation between each other.

It means that employees have reduced their time for entertainment and thus reduced their visits to their relatives and enjoyment at their relatives' place which they used to do when the layoff scenario was not prevalent.

Interpersonal relation

Table-11: Intra correlations for interpersonal relations

		IR1	IR2	IR3	IR4
IR1	Pearson Correlation	1	-.040	.214*	.133
	Sig. (1-tailed)		.372	.037	.136
IR2	Pearson Correlation		1	.026	.000
	Sig. (1-tailed)			.415	.499
IR3	Pearson Correlation			1	-.080
	Sig. (1-tailed)				.255
IR4	Pearson Correlation				1
	Sig. (1-tailed)				
*. Correlation is significant at the 0.05 level (1-tailed).					

IR1 = I don't get along easily with others now.

IR3 = I get frustrated easily.

Interpretations: IR1 and IR3 have a significant relation with each other and the two variables have a positive correlation (0.214) with each other i.e. they are directly related to each other. It means that when a person gets more frustrated, it becomes difficult for that person to get along with the other person because then other person also would not accept that behavior. And more frustration leads to more difficulty in getting along with others and vice versa.

Inter correlation

Table-12: Inter correlations for different parameters

		Totalstr	TotalHp	TotalEi	TotalLi	TotalIC	totalIR
Totalstr	Pearson Correlation	1	.472	.279	.131*	.007	-.039
	Sig. (1-tailed)		.050	.005	.014	.453	.261
TotalHp	Pearson Correlation		1	-.067	-.025	-.016	.208**
	Sig. (1-tailed)			.104	.341	.392	.000
TotalEi	Pearson Correlation			1	.092	.033	.063
	Sig. (1-tailed)				.061	.289	.148
TotalLi	Pearson Correlation				1	.076	.017
	Sig. (1-tailed)					.103	.387
TotalIC	Pearson Correlation					1	.030
	Sig. (1-tailed)						.310
totalIR	Pearson Correlation						1
	Sig. (1-tailed)						
*. Correlation is significant at the 0.05 level (1-tailed).							
**. Correlation is significant at the 0.01 level (1-tailed).							

**Interpretations:** The parameter totalstr which denotes the total amount of stress in an employee has a significant relation (0.472, 0.279 and 0.131) with the parameters Totalhp, TotalEi and TotalLI respectively. Also the relation between all these factors is a positive relation meaning that stress has a direct relationship with the health problems, emotions and leisure impact. It is seen that more is the stress; more would be the problems that an employee would be facing. Stress leads to great health problems like cold, headache, sweating etc. Stress also leads to person becoming short tempered, arousing a feeling of jealousy, becoming lonely and anxious very often. When a person is in stressful condition the person doesn't think of entertainment as the mind doesn't have place to think on this direction. The person would not like to visit his/her relatives or taking meals in a restaurant.

The relation between the parameters Totalhp and TotalIR is significant (0.208) and it is also seen that they have a positive relationship between the two. Totalhp here denotes the total health problems and totalIR denotes the

total interpersonal relations of the employees. It means that the health problems affect the interpersonal relations of the employees. If an employee has health problems like headaches, catching cold often, having bowel disorders etc., it leads to adverse effect in maintaining the interpersonal relationship with others. As due to the existing health problems the person gets more frustrated, end up in conflicts, does not get along easily with others.

### **FINDINGS**

From the analysis, it can be seen that the layoffs cause a great amount of stress on the existing employees and it is also seen that stress and emotions & stress and interpersonal relations are interlinked. So in line the exchange theory which is based on the principle of reciprocity, it says that people will give back in the same way with what they perceive they have received, or failed to have received, from the other party in the relationship (here the organization). Thus, the more that employees experience stress in the workplace, the more likely they may be to conclude that the organization is not treating them well, by contributing to their experience of stress. As a result, people have reciprocated by exhibiting negative attitudes like jealousy, anger, not getting along with their coworkers. And all these factors would affect the performance of the employees.

We see that when employees see their coworkers which may have been their close friends are laid off, they feel lonely and this also arouse negative feeling amongst them against the organizations and they feel stressed and would not like to come to the workplace. They have fear in their mind that if their friend or peer can be laid off, he can also get laid off in the next round which arouses negative feeling in the employee. But if the organization is able to convince the employees that they are there for them and they would not do anything that would cause adverse effect in the employees, then this situation can be controlled. Organization needs to make sure that employees are the assets of the organization and not the burdens on them. The increased pressure has also increased negative feelings of the employees towards the organization.

It is also analyzed that the layoffs impact Interpersonal relations to a great extent which means that the employees are forced to do the layoffs and they don't have any other option and they can't change their behavior by changing the employer and they don't think in a positive way that how the organization would benefit from this but rather they get negativity towards the organization. And this problem lies because the organizations are not valuing their employees and are not involving employees in the layoff process so that they could get to know that why organization is following this practice of layoffs.

### **CONCLUSIONS**

It is concluded that the layoffs create adverse effects on the psychological well being of the employee, which leads to stress, health problems, reduction in entertainment level. It is seen that due to layoffs the interpersonal relations also get effected to some extent. It is also seen that stress is the main factor which is correlated with almost all the parameters and the major outcome of the layoffs is the stress which is responsible for the further problems that an employee faces during this period of time. It is also concluded that the layoffs have less impact on the employees' children as the employees don't want to make their children lives difficult.

### **SUGGESTIONS AND RECOMMENDATIONS**

HR can play a very important role in today's scenario and can help the employees fight the impact that the layoffs have on employees and increase their morale level. HR needs to make the employees understand that employees are an asset to the organization and not the burden on them.

#### **Following steps would be helpful in reducing the negative impact of layoffs on existing employees**

- Making the communication system open, tell the truth and seek advice from the employees.
- Involve the survivors in decision making
- Make the top management understand the consequences of layoffs
- Facilitate sharing of emotions at workplace
- Adopting a helping relationship with the employees
- Transparency should be there
- Consider employees' family
- Ensure a perception of fairness in restructuring decisions
- The news should be given in a planned way

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**HUMAN RESOURCE MANAGEMENT AND FUTURISTIC APPROACH**

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**ABSTRACT**

*The changing scenario of organizational framework, it has been realised that, traditional sources of competitiveness, such as strong financial possessions, production capacity, cheap & easily available raw materials, distribution channels etc., are considered necessary, but no longer sufficient for managerial success. This paper emphasizes human resources as a source to achieve the ready for action advantage in the age of globalization and its relation to human resources, which are viewed as a source of competitive advantage. Therefore, the aim of this paper is to reveal that human resources management is essential to ensure the success of any organization which is based on the belief that an organization gains competitive advantage through utilization of its employee power effectively and efficiently. Referring to this global challenge of HRM, efforts to identify whether the HRM can be considered as a source of competitive advantage of the firms or not? Finally the findings of this study highlight the value of human resources (HR) and its strategic activities which have an influence on organizations concert and competitive abilities. Human resource management-Human resources, their knowledge, skills and competencies as central binding force among them, become the most valuable asset, the new source of wealth, and the key ingredient of spirited advantage. Modern thought to HRM is work knowledge and intellectual capital is crucial for economic success, it is logical that the ability to attract, retain, and use the talents of employees, provides a competitive edge. subsequently, the HR functions, recruiting, training & retaining, now are merged with the mainstream of organizational strategy and management and finally aligned with Business objectives.*

*Keywords: Competitive advantage, skill competencies, Globalization, Human Resource Management (HRM)*

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**INTRODUCTION**

Human resource management, which deals with the manpower of the organization. Research says that people are more attracted to companies that provide customized HR practices, and they're more likely to stay and perform at their best. In order to survive the competition and be in the race, HR department should consciously update itself with the transformation in HR and be aware of the HR issues cropping up. With high attrition rates, poaching strategies of competitors, there is a huge shortage of skilled employees and hence, a company's HR activities play a vital role in combating this crisis. Suitable HR policies that would lead to the achievement of the Organization as well as the individual's goals should be formulated. HR managers have to manage all the challenges that they would face from recruiting employees, to training them, and then developing strategies for retaining them and building up an effective career management system for them. Just taking care of employees would not be enough; new HR initiatives should also focus on the work life issues; quality management standards; human resource outsourcing; retention strategy; pay and benefits; training and development; performance and reward systems; globalization of HR operations; and legal and ethical guidelines in managing human resources. Into the corporate culture that it can be considered the DNA of the company. However, even in such companies, the human resources department has been practically untouched by Six Sigma. In a recent conference of the human resources professionals in Chicago, it was clear that HR people are now looking to benefit from Six Sigma initiatives. Businesses develop strategies for profit and growth. The strategy is driven down through action plans for execution. Most strategies fail to get down to the floor level and get lost in the middle layers of management, but HR can help execute the profit and growth strategy through the use of Six Sigma. It must be understood that HR isn't a huge part of any business, but it has a huge effect on every business. Human resources should be considered as human capital. HR must ensure that there's good return on investment in human capital. Typical HR functions include benefits management, compensation, recruitment and skills development. Innovation and change management must also become key functions in the HR department. To provide all individual with remuneration and benefits based on their contribution and value to the organization in a fair and transparent manner. Competitiveness of the compensation offered in comparison with the prevailing market's reality is the driving force. In addition to managing these functions well, managing idea to innovation.

**TRENDS AND ISSUES IN HRM**

"Balancing work and personal life is the most important value as it takes into consideration all the plus and minus points in all respects," says one researcher for Jobtrak.com. "Having time to spend with your family and friends makes working worthwhile." The most common form of work life issue includes flexi time; time-off in

lieu; self-roistering; job sharing ; working from home; staggered hours ; shift swapping ; annualized hours ; tale working ; professional development work ; compressed working hours ; term-time working and flexible retirement schemes. Making quality improvements was once thought to be the sole responsibility of specialists HRM places greater emphasis on a number of responsibilities and functions such as relocation, orientation and translation services to help employees adapt to a new and different environment outside their own country.

A firm finds a specialist who can be more effective in providing a service or component that was previously handled in-house. The move towards the flexible firm has seen a trend towards the outsourcing of activities outside the core Much attention has been paid to the growing use of temporary workers provided by the 'staffing' industry; but along side is, much less notice has been the growing human resource business process outsourcing industry (HR-BPO)—which takes over whole HR activities. Starting with humble payroll processors, HR-BPO providers now offer to take over virtually any HR activity or even the entire function. Experts today suggest that in a few years, up to 90% of HR functions will be fully automated- bringing huge savings for the both the firm that is outsourcing and the firm providing the outsourced services. The literatures also suggest the five competitive forces that are driving more companies to outsource some or all of their HR activities. These forces are downsizing, rapid growth (or decline), globalization, increased competition, and restructuring. Over the past decades, these forces have significantly altered the strategy and structure of many firms. Six Sigma has been well applied in manufacturing through improving processes that use the DMAIC methodology. Some larger corporations have integrated Six Sigma so well.

### **OBJECTIVE OF THE STUDY**

- To study two aspects of the environmental factors that contribute to the growth of hotel industry e.g. government policy, legal environment.
- To make an analytical study of human resources development programs, developed and used by star hotels.
- To study the impact of human resources development programs on professional skills currently used in star hotels.
- To balance the pros and cons of home country and host country evaluations, performance evaluations should combine the two sources of appraisal information.

### **RESEARCH METHODOLOGY**

This chapter is included with the purpose of making clear the steps taken by the student for the systematic completion of the research. The steps taken are the common steps generally taken by any student doing research in the faculty of management and the topic selected by him belongs to 'Research in social sciences'. Human resources development programs undertaken by star hotels (i.e. three stars and above) in Pune, the training programs they have arranged and implemented 2001 onwards, their impact on individual performance and organizational behavior are the main points on which research student has focused his attention. The scope of enquiry was restricted to Pune city star hotels. The enquiry also covered star hotel management, to develop human resources through training programs (other aspects of star hotel management are not considered). The last part covers the linkage between development programs, individual performance and organizational behavior.

### **SIGNIFICANCE OF STUDY**

The major challenge of this sector is shortage of skilled employees along with the challenge of attrition rate. Skilled chefs and managers are in great demand. Managers require huge range of competencies such as, people management, practical skills, business insights, analytic skills, succession planning, and resource development in order to get success in this sector. In addition to that, employees are not enough trained on Business Etiquettes, Courtesy, and Business Communication. Hospitality is all about handling people. So an employee must have right attitude, tolerance, and listening skills in order to move up the hierarchy. There is still a long way to go to inculcate good public relation, interpersonal skills.

### **LIMITATIONS OF THE STUDY**

The scope of this research is restricted to star hotels in Pune city only. In Pune city there are 39 star hotels, spread over different areas of the city. Pune, during the last five decades (especially after 1960) after Panshet incidence has developed in many dimensions. It is now, no more, known as pensioners city, but as a city with IT industries, a city of sports and cultural activities and has come up with a large varies industries, government offices, number of gardens (green pockets), hotels, communication and entertainment facilities. It is contributing to the economy of Maharashtra. Considering the future growth possibilities for star hotels, H.R.D has become important for development of human capital to fulfill growing expectations about the quality and standard services by domestic and foreign visitors.

- 1) The present study is confined with the hotel industry ( 3star & above)
- 2) The research will restrict to training and development only.
- 3) The geographical limit of the present is Poona district and outside city in India.
- 4) The sample of the present study will selected by random sampling method.

### CONCLUSION

Much attention has been paid to the growing use of temporary workers provided by the 'staffing' industry; but along side is, much less notice has been the growing human resource business process outsourcing industry (HR-BPO)—which takes over whole HR activities. Starting with humble payroll processors, HR-BPO providers now offer to take over virtually any HR activity or even the entire function. Experts today suggest that in a few years, up to 90% of HR functions will be fully automated- bringing huge savings for the both the firm that is outsourcing and the firm providing the outsourced services.

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**REGIONAL RURAL BANK: -AN IMPORTANT MECHANISM FOR THE FINANCIAL INCLUSION****Shiv Swaroop Jha**

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**ABSTRACT**

*Present days structure of Regional Rural Bank is the brain child of M.S. Swaminathan. Regional rural banks were established on 2 oct 1975 on the recommendation of Narasimhan working committee Group. The shares of this bank are in the ratio of 50:35:15 by the central government, sponsoring bank and the state government respectively. Regional Rural Banks have been in existence for around 32 years in the Indian financial scenario. Inception of Regional Rural Banks may be seen as a unique experiment as well as experiment in improving the efficacy of rural credit delivery mechanism in India. Keeping in view the local peculiarities, an effort was made to integrate commercial banking within the broad policy framework towards social banking through joint shareholding of Central Government, the Concerned State Governments and the Sponsoring Bank*

*RRBs have the potential to play a greater role in financial inclusion primarily because of their strategic geographical location in remote places in the country. In certain parts of the country, e.g. in the states of UP, Bihar and North Eastern regions, the banking system mainly exists in the form of RRBs. Recognizing the importance of achieving inclusive growth in the country, the RBI has permitted banks to utilize the services of non-governmental organizations (NGOs), self-help groups (SHGs), micro finance institutions (other than non-banking financial companies) and other civil society organizations as intermediaries to provide financial and banking services through the use of business facilitator and business correspondent (BC) models. The BC model allows banks to do 'cash-in-cash-out' transactions at a location much closer to the rural population, thus addressing the last mile problem. However, customers in many parts of the country have to travel long distances, spend on transportation costs besides sacrificing their daily wages to visit the banks for doing their routine banking transactions and such inaccessibility contributes to the dormancy of many accounts in RRBs as well.*

*Keywords: RRB's, Micro Finance, Economic Growth*

**INTRODUCTION**

Regional Rural Banks (RRB's) were established on 2 October 1975, the idea of which have been conceived by M.S. Swaminathan. Regional Rural Banks have been in existence for around 32 years in the Indian financial scene. Inception of Regional Rural Banks may be seen as a unique experiment as well as experience in improving the efficacy of rural credit delivery mechanism in India. Keeping in view the local peculiarities, an effort was made to integrate commercial banking within the broad policy framework towards social banking through joint shareholding of Central Government, the Concerned State Governments and the Sponsoring Bank (50:15:35)

The genesis of the Regional Rural Banks may be traced for the need for a stronger institutional arrangement for providing rural credit. The institution of Regional Rural Banks (RRBs) was created to meet the excess demand for institutional credit in the rural areas, particularly among the economically and socially marginalized sections. Although the cooperative banks and the commercial banks had reasonable records in terms of geographical coverage and disbursement of credit, in terms of population groups the cooperative banks were dominated by the rural rich, while the commercial banks had a clear urban bias.

The Banking Commission (1972) recommended to establish an alternative institution for rural credit and ultimately Government of India established Regional Rural Banks – a separate institution basically for rural credit on the basis of the recommendations of the Working Group under the Chairmanship of Sh. M. Narasimhan. In order to provide access to low-cost banking facilities to the poor, the Narasimhan Working Group (1975) proposed the establishment of a new set of banks, as institutions which “combine the local feel and the familiarity with rural problems which the cooperatives possess and the degree of business organization, ability to mobilize deposits, access to central money markets and modernized outlook which the commercial banks have”.

Subsequently, the Regional Rural Banks were setup through the promulgation of RRB Act of 1976. The RRBs Act, 1976 succinctly sums up this overall vision to sub-serve both the developmental and the redistributive objectives. The RRBs were established “with a view to developing the rural economy by providing, for the purpose of development of agriculture, trade, commerce, industry and other productive activities in the rural

areas, credit and other facilities, particularly to small and marginal farmers, agricultural laborers, artisans and small entrepreneurs, and for matters connected therewith and incidental thereto”.

### **OBJECTIVE OF THE STUDY**

The research has been done after considering following objectives

- To know about the objective behind the establishment of RRB's in India.
- To know about the functions & role of RRB's as an important instrument in the financial inclusion in India
- To know about the various issues and challenges which are being faced by the RRB's in India

### **RESEARCH METHODOLOGY**

This research is based on secondary data of journals, articles, newspapers, magazines, reports and academic literature on the Regional Rural Banks (RRB's). Secondary literature, including studies and policy documents from various official sources such as RBI, DFS, NABARD, etc. apart from research studies of independent scholars and agencies. Policy discourse around the emerging financial architecture in its significance for the RRBs. Latest data on RRBs outreach and performance from RBI and DFS.

As per the objective of the study descriptive type of research design has been adopted and exploratory research technique has been used to have more accuracy and rigorous analysis of the research study.

### **2. OBJECTIVES of RRB's**

Regional Rural Banks were supposed to evolve as specialized rural financial institutions for developing the rural economy by providing credit to small and marginal farmers, agricultural laborers, artisans and small entrepreneurs. Their equity is held by the Central Government, Concerned State Government and the Sponsor Bank in the proportion of 50:15:35 respectively. The mandates of these rural financial institutions were to:

- a) Take banking to the doorsteps of the rural masses, particularly in areas without banking facilities;
- b) Make available cheaper institutional credit to the weaker sections of society, who were to be the only clients of these banks;
- c) Mobilize rural savings and canalize them for supporting productive activities in the rural areas;
- d) Generate employment opportunities in the rural areas and bring down the cost of providing credit in rural areas.

RB (Regional Rural Bank) is also known as 'Gramin Bank'. It was established in 26<sup>th</sup> September 1975 with the objective of the economic development of India. The ideology behind RRB is to focus on the upliftment of the rural economy because it is assumed that Real growth of Indian Economy lied in the freeing of rural masses from unemployment, acute poverty and socio-economic backwardness.

### **RRBs works for fulfilling the needs of rural population comprised of**

- Agricultural laborers
- Artisans
- Small entrepreneurs
- Small and marginal farmers
- Mobilize deposits from rural households

The authorized capital of an RRB is fixed at Rs. 1 crore and its issued capital at Rs. 2 lakhs. Of the issued capital, 50 per cent is to be subscribed by the Central Government, 15 per cent by the concerned State Government and the rest 35 per cent by the sponsoring bank.

The working and affairs of the RRB are directed and managed by a Board of Directors consists of a Chairman, three directors to be nominated by the Central Government, and not more than two directors to be nominated by the State Government concerned, and not more than 3 directors to be nominated by the sponsoring bank. The chairman is appointed by the Central Government and his term of office does not exceed five years.

The RRBs Act has made various provisions regarding the incorporation, regulation and working of RRBs. According to this Act, the RRBs are to be set-up mainly with a view to develop rural economy by providing credit facilities for the purpose of development of agriculture, trade, commerce, industry and other productive activities in the rural areas.

Such facility is provided particularly to the small and marginal farmers, agricultural laborer's, artisans, and small entrepreneurs and for other related matters.

**The objectives of RRBs can be summarized as follows**

- (i) To provide cheap and liberal credit facilities to small and marginal farmers, agriculture labourers, artisans, small entrepreneurs and other weaker sections.
- (ii) To save the rural poor from the moneylenders.
- (iii) To act as a catalyst element and thereby accelerate the economic growth in the particular region.
- (iv) To cultivate the banking habits among the rural people and mobilize savings for the economic development of rural areas.
- (v) To increase employment opportunities by encouraging trade and commerce in rural areas.
- (vi) To encourage entrepreneurship in rural areas.
- (vii) To cater to the needs of the backward areas which are not covered by the other efforts of the Government?
- (viii) To develop underdeveloped regions and thereby strive to remove economic disparity between regions.

The RRBs Act has made various provisions regarding the incorporation, regulation and working of RRBs. According to this Act, the RRBs are to be set-up mainly with a view to develop rural economy by providing credit facilities for the purpose of development of agriculture, trade, commerce, industry and other productive activities in the rural areas.

Such facility is provided particularly to the small and marginal farmers, agricultural laborer's, artisans, and small entrepreneurs and for other related matters.

**Functions & Role of RRB's as an important instrument in the financial inclusion in India**

**The functions of the RRB are as follows**

1. Granting of loans and advances to small and marginal farmers and agricultural labourers, whether individually or in groups, and to co-operative societies, agricultural processing societies, co-operative farming societies, primarily for agricultural purposes or for agricultural operations and other related purposes;
2. Granting of loans and advances to artisans, small entrepreneurs and persons of small means engaged in trade, commerce and industry or other productive activities within its area of co-operation; and
3. Accepting deposits.

**Role for RRB:** RRB has following major role in implementation of central and state government sponsored various programme of poverty alleviation as-

- Swarnajayanti Gram Swarozgar Yojana (SGSRY)
- Prime minister Rozgar guarantee Yojana
- Antyabasai
- Old Age pension
- Midday Meal
- Indira Awas Yojana
- Payment to Aganbadi
- Scholarship to Students
- Labor payment for NAREGA laborers

NABARD is the main regulatory authority of all Regional rural Banks in India.

**5. RRB'S AND FINANCIAL INCLUSION**

RRBs have the potential to play a greater role in financial inclusion primarily because of their strategic geographical location in remote places in the country. In certain parts of the country, e.g. in the states of UP, Bihar and North Eastern regions, the banking system mainly exists in the form of RRBs. Recognizing the

importance of achieving inclusive growth in the country, the RBI has permitted banks to utilize the services of non-governmental organizations (NGOs), self-help groups (SHGs), micro finance institutions (other than non-banking financial companies) and other civil society organizations as intermediaries to provide financial and banking services through the use of business facilitator and business correspondent (BC) models. The BC model allows banks to do 'cash-in-cash-out' transactions at a location much closer to the rural population, thus addressing the last mile problem. However, customers in many parts of the country have to travel long distances, spend on transportation costs besides sacrificing their daily wages to visit the banks for doing their routine banking transactions and such inaccessibility contributes to the dormancy of many accounts in RRBs as well.

The objective of financial inclusion would be fully achieved if RRBs are able to bring banking to the door step of the customers just as the commercial banks have started taking such initiatives. It is here that the large scale usage of information and communication technology (ICT) solutions lends support. RRB presence in rural areas leveraged by ICT would considerably enhance their reach, and delivery of banking services to the remote corners of the country.

The Committee on Financial Inclusion (Chairman: C. Rangarajan), also emphasized the role of IT and banking correspondents on a larger scale for achieving financial inclusion. The Committee envisaged that RRBs may extend services to unbanked areas and increase their credit to deposit ratio. The need for setting target for microfinance and financial inclusion was also envisaged. The Committee also recommended 100 percent financial inclusion of the large number of hitherto excluded farm households in order to reduce their indebtedness to the unregulated/informal sector.

The Committee estimated that 51.4 percent of the farm households do not get any credit from formal or informal sources. The North Eastern Region, Eastern Region and Central Region, taken together, account for 68 percent of the farm households having no access to credit.

The reach of RRBs particularly in regions and across population groups facing the brunt of financial exclusion is impressive. In rural areas, RRBs account for a substantial 37 percent of total offices of all scheduled commercial banks. In semi-urban areas, their share comes to 15 percent. With the process of merger strengthening, to some extent, the viability of the RRBs and also because of the local feel and familiarity they command, RRBs are in a unique position to play a very useful role in financial inclusion.

The RRBs need to be encouraged and supported in their financial inclusion initiatives for, inter alia, the following reasons:

1. Have presence in most of districts of the country.
2. Stronger presence in NER, ER and Central Regions.
3. Essential particularly for the areas where the financial exclusion rate is quite high.
4. Higher concentration of rural and semiurban branches.
5. Have potential for intake of many more small accounts.
6. Though there are 56 RRBs with relatively reasonable performance, their net worth is not high, and thus, a majority of RRBs are not financially very sound.

#### **RRB's ACHIEVEMENTS UNDER FINANCIAL INCLUSION STRATEGY**

Measures and products designed to reach the unbanked and the poor have been advocated and consciously implemented for decades. However, in recent years, the starting point of the understanding of term 'financial inclusion' and the related products is associated with the report of the Rangarajan Committee on Financial Inclusion (2008)<sup>5</sup>. Elaborating the thrust of financial inclusion by the RBI, its Deputy Governor states that RBI "are marketing the paradigm of financial inclusion through the bank-led model" (Chakrabarty, 2011).

Thus, the RBI perception appears to be that financial inclusion is largely a matter related to banks' initiatives rather than the concern of a wider range of players in microfinance covering PACS, MFIs, SHGs, etc. Consequently the financial inclusion discourse has focused on bank-level products and initiatives and the corresponding targets. The two planks of the commercial banks' involvement in the larger financial inclusion project have been (i) avenues for outsourcing through different types of agent structures above; and (ii) the introduction of IT-based devices and innovations for low-cost operations and for accounting and MIS. In fact, the current financial inclusion campaign has been positioned as a kind of successor to the (less than successful) earlier attempts at inclusive finance through RRBs, SHGs, etc. The approach to RRB reform (of recapitalization

and amalgamation) too had been seen as one which was politically pragmatic characterized by an indifference towards the financial inclusion objective of RRB operations (MCril, 2008). Nevertheless it was also observed that despite the apparent importance of commercial banks even in the rural areas however they were neither able nor willing to serve the poorest sections of the population. By comparison, in the credit categories of direct relevance to financial inclusion, RRBs held over a quarter of agricultural credit accounts and over half of all artisan/tiny industry loan accounts with barely 11% respectively in the total credit for these two categories. It also showed that RRBs had a far higher proportion of small loan accounts than other types of banks.

In similar vein, the Annual Report 2013–14 of RBI (RBI, 2014) has stated that microfinance institutions and small RRBs can certainly help in furthering access to finance. However, they cannot on their own bridge the gaps. Well-capitalized and robust financial institutions are needed to take up the financial inclusion agenda.

The Swabhimaan programme launched by the Ministry of Finance, Government of India and the India Banks' Association (IBA) aimed to bring banking within the reach of the masses through brick and mortar branches or through various forms of ICT-based models including through business correspondents (BCs). All public and private sector banks were advised to draw a three-year financial inclusion plan (FIP) starting from April 2010, duly approved by their Board and with related business plans. The spectacular growth numbers in the parameters being tracked by FIPs would appear to suggest that the financial inclusion project is on track in terms of achievements and initiatives aimed at financial inclusion. Banks have made notable, sporadic, efforts at innovation in support in the introduction of technology, financial literacy and other methods of expanding outreach, with RRBs too contributing in equal measure.

In this they have been supported by NABARD through the Financial Inclusion Fund (FIF) and the Financial Inclusion Fund (FITF). FIF meets the cost of developmental and promotional interventions and FITF meets the cost of technology adoption for financial inclusion<sup>6</sup>. As on 31 March 2014 cumulative disbursements were Rs. 135.35 crores under the FIF and Rs. 221.55 crores under FITF.

The experience of the FIFs to increase outreach to an increasing large number of villages and unserved areas have fed into the Pradhan Mantri Jan-Dhan Yojana (PMJDY) launched in 2014. According to the PMJDY Mission document, though the banks achieved their targets under the first phase of the Swabhimaan campaign, it had very limited reach and impact. Public Sector Banks (PSBs) including RRBs estimated that by 31 May 2014, out of the 131.4 million rural households which were allocated to them for coverage, about 59.4 million remained uncovered. Comprehensive financial inclusion (FI) under the mission is based on six pillars of achievement with well-defined targets

#### Pradhan Mantri Jan - Dhan Yojana (Accounts Opened As on 15.07.2015) (Table 1)

(All figures in crore)

S. No		No of Accounts			No of Rupay Debit Card	Balance in Accounts	% of Zero Balance Accounts
		Rural	Urban	Total			
1	Public Sector Bank	7.24	5.98	13.22	12.25	15,698.68	50.83
2	Rural Regional Bank	2.57	0.44	3.02	2.19	3493.76	50.00
3	Private Bank	0.41	0.28	0.69	0.61	1095.93	47.83
4	<b>Total</b>	10.21	6.71	16.92	15.05	20288.37	50.59

Sources: DFS, GOI

Table 1 shows RRB achievements under the new financial inclusion strategy. It shows the number of accounts opened under the PMJDY as on 15.07.2015. An indicator of participation in financial inclusion efforts currently is the number of accounts opened under the PMJDY. RRBs opened 3.02 crore accounts under PMJDY, as on 15.07.2015, or nearly 18 per cent of total accounts. Public sector banks opened 13.22 crore accounts and private banks 0.69 crore accounts. RRBs accounted for 2.57 crore accounts in rural areas opened under the PMJDY up to 15.07.2015. This represents over 25 per cent of the total 10.21 crores accounts opened in rural areas. RRBs accounted for nearly Rs. 3,500 crores out of Rs. 20,288 crores of deposits, representing over 17 per cent of the balances in these accounts. The percentage of zero balance accounts out of these newly opened accounts is 50 per cent. RRBs have also opened 440,000 accounts in urban areas.

Public sector banks issued 12.25 crore RuPay debit cards, and private banks 0.61 crore such cards. The number of RuPay debit cards issued by RRBs was 2.19 crores, out of a total number of 15.05 crore such cards issued by all types of banks.

Apart from the accounts opened under PMJDY and savings deposited by RRBs, they have accounted for a large number of initiatives in terms of products offered and infrastructure support provided towards financial inclusion. The range of such products is large and varies from RRB to RRB. It includes various types of deposit accounts and credit/ debit smart cards, insurance products, financial literacy initiatives, Direct/Electronic Benefit Transfers (DBT and EBTs), pensions and various types of loan initiatives such as housing, education. These products have been deployed through various types of outlets, which include brick and mortar branches, Customer Service Point (CSP) outlets, kiosk banking, ultra small branches (USBs), with the help of ATMs and tablet-based micro ATMs and Point of Sale (PoS) devices. The range of products and delivery models for a sample of 15 of the 57 RRBs is illustrated in Appendix 1. This has been updated from information provided during the Inclusive Finance India Award 2014 Process, and from Annual Reports 2013-14 of the respective banks.

As per NABARD sources, in terms of Financial Inclusion, RRBs are playing a major role. All RRBs have migrated to the Core Banking Solution platform – for which NABARD by supporting 28 loss-making banks has played a pivotal role. Also they have, on par with other banks, taken up RTGS and have been supported for deploying ATMs for banking and financial services in North-East region. All RRBs have signed a MoU for implementing Jan Suraksha Yojana and Jeevan Jyoti Yojana. They have issued smart cards of various types and generally have been at the forefront of the financial inclusion measures.

However, this rapid expansion of the banking and financial infrastructure has not been without cost. The opening of new accounts and building the physical and human infrastructure for the financial inclusion mission has been undertaken on a war footing without regard to the initial costs and necessary maintenance costs. The expenditure on opening and servicing over three crore new accounts under the financial inclusion drive – even though half of them may not yet be operational – is quite substantial and goes beyond the call of the RRBs functions and immediate objectives. It would be instructive to examine whether the RRBs load of JDY and financial inclusion efforts proportional to their branch strength, staff strength and total business and capital resources – or have the public sector banks silently shifted this burden over to RRBs? Indeed, as the RBI Governor has recently stated, and development bankers concur, public sector banks including RRBs should be reimbursed for the expenses incurred in building this new financial infrastructure.

## **6. PROBLEMS & CHALLENGES OF RRB**

1. RRB's are facing the problem of inadequate finance. They are dependent on NABARD to collect finance for their further operation. Poor rural people are unable to save anything due to poverty and low per capita income. The low level of saving of these customers create obstacle for RRB's to collect sufficient deposits.
2. High overdues and poor recovery of loan is one of the biggest concerns affecting the functioning of RRB's. Reasons being poor access of granting loan, insufficient and untrained staff, unproductive or less productive use of credit, inadequate production, poor marketing facilities and improper channel of recovery system.
3. There is also a problem of regional imbalance in banking facilities provided by RRB's. They are creating this problem by concentrating their branches in some specific states and districts & loose other prospective group of customers.
4. Many RRB's are suffering from the problem of heavy loans because of low repaying capacity of their customer, untrained staff, low level of deposits and heavy sanction of loan without checking the creditworthiness of their customers.
5. These banks have still not played a significant role in poverty alleviation of the country. Although various efforts have been made in this regard but lack of economic infrastructure, poor marketing strategies, poor knowledge of customers, low production, low awareness about savings have created many hurdles for RRB's.
6. Lack of proper co-ordination between RRB's and other financial institution like commercial banks, NABARD and other co-operative bank has badly affected the performance of these banks.

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**COMMUNITY RADIO AS FORCE MULTIPLIER OF FINANCIAL EMPOWERMENT FOR RURAL WOMEN: A CASE STUDY OF ALFAZ-E-MEWAT**

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**ABSTRACT**

*This study analyses the impact of Community Radio program “Vittiya-Vaani” (Financial Voice) aired on Community Radio Alfaz-E-Mewat on financial empowerment of rural women in the Indian state of Haryana. The Nuh district of Haryana, which was earlier known as Mewat, is situated just 70 kilometers away from the glare of the National Capital Territory of Delhi and Gurugram. The total literacy in this district is 56 percent and women literacy is only 36 percent. The area is so underdeveloped that about 70 percent of the children in the district are victims of anemia i.e. lack of blood and only 27 percent of children have been immunized. There are still many villages in this district where there is no bank account of any member in the family. Therefore, this district is a unique case in itself for assessing the impact of any communication which can bring considerable change in the lives of the people particularly the illiterate women. The study was done taking some secondary data as source of analysis.*

*The units of analysis were the level of exposure of women to Community Radio, the financial understanding of the illiterate women, the factors contributing to their financial knowledge and the impact of “Viitiya Vaani” program on the financial empowerment of illiterate women. The financial empowerment has been measured in terms of their awareness about banking system through the Community Radio program and decision to open savings account in a bank.*

*The paper also analyzes the difficulties faced by rural women while opening the savings account and how this problem is being addressed by organizing the awareness camps in the villages by the society which operates the Community Radio. This two layer intervention is a role model for empowering the rural women by motivating them to first realize that why do they need a bank account and then reaching out to them through the camps to listen to their grievances and provide solutions.*

*Keywords: Community Radio, Women, Financial Empowerment, Education, Media*

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**INTRODUCTION**

A Community Radio Station (CRS) is one that is operated for the community and by the community. It is characterized by its ownership and programming and the community it is authorized to serve. Mostly the Community Radio is owned and controlled by a non-profit organization, which aims to serve community at large. Its programming is based on community access and participation and should reflect the special interests and needs of the listenership it is licensed to serve (Rajagopal, 2000). It is a third tier broadcasting along with public and private radio broadcasting (Fraser & Estrada, 2001). This radio gives voice to the marginalized communities, voluntary organizations, civic groups, NGO's, women's groups/organizations, and so on. Community Radio Stations are now partnering into broadcasting to share, express, empower, give voice, to many communities to benefit them with the broadcast (Page & Crawley, 2001).

The communication and information need of every society is different. “Every nation needs to define development for it and find its own strategy” (Srampickal, 2006). India being a pluralistic society needs an entirely different communication approach. With change in every region, tradition, culture, and group, a different communication need and strategy is required. It is not just a nation's growth in terms of power, trade and economy but there is more to development (Malik & Pavarala, 2007). A society is said to be developed when its people are informed, aware and are empowered. They have their unique cultural and indigenous identity. Many non-governmental organizations and media-activist groups struggled and campaigned for setting up local radio broadcasting services to help and address the issues of their community and serve their needs, interests and aspirations. In 2007 the government announced the Community Radio Policy and all these voluntary groups joined together to constitute Community Radio Forum (CRF) of the country to support and promote the setting up of Community Radio stations in India.

**EMPOWERMENT OF WOMEN**

The term empowerment alludes to a scope of exercises from singular self-declaration to aggregate obstruction, dissent and preparation that test essential power relations (Bandelli, 2011). For people and gatherings where class, position, ethnicity and sexual orientation decide their entrance to assets and power, their strengthening

starts when they not just perceive the fundamental powers that persecute them but the actions to change the overall power connections. Empowerment, in this manner, is a procedure went for altering the nature and course of foundational powers, which underestimated women and other hindered segment in a given setting (Kumar & Jaimon, 2005; ).

Empowerment is a procedure by which the weak gets more noteworthy authority over the conditions of their lives (Agrawal, 2007). It is currently central assumption in political and social, instructive, social, sexual, individual and administrative talks. Strengthening is connected with redistribution of intensity. Strengthening has both individual and social viewpoints. At individual level it is noteworthy change in the mental self view and mental set and at the network level it is aggregate battle for positive social change.

“Convinced that the full and complete development of a country, the welfare of the world and the cause of peace require the maximum participation of women on equal terms with men in all fields” (Preamble to Convention on the Elimination of all forms of Discrimination Against Women, 1979).

Strengthening actually implies making somebody great, encouraging the feeble to achieve quality, to build one's confidence, to assist somebody with being self-assured/fearless, to empower somebody to go up against treachery and persecution and to help somebody to battle for her rights. 'Enabling ladies really implies fortifying them to go up against family, network, station, religion and conventional powers man centric powers and predispositions working inside society. This showdown guarantees their full support in each part of social and national improvement. Strengthening is where ladies, independently and all in all, end up mindful of how control relations work in their lives. With this mindfulness they increase self-assurance and quality to challenge sexual orientation imbalances at the family unit, network, national, provincial, and universal levels.

In India ladies involve half of its aggregate populace. With the approach of 21st Century and its advancement in different logical and innovative time the status of lady are additionally changing at a quick pace yet we can't overlook the plain presence of an existence where lady are separated, underestimated and abused as a result of different sex partition issues. Ladies are imperative HR in enhancing the personal satisfaction.

The nation's inclusive improvement depends extraordinarily on the incorporation of women in its advancement procedure (Balan & Norman, 2012). They have been the transmitters of culture in all social orders. The status of ladies in a general public is a genuine file of its social, social, religious and profound level. Strengthening is basically a change from a place of implemented feebleness to one of intensity. It advances ladies' characteristic qualities and positive mental self portrait. Picking up control implies gaining capacity and chance to partake and contribute in the social improvement process innovatively and genuinely. The procedure of strengthening empowers them to create in them self-poise. It empowers them to raise voice and battle against treachery, misuse, mishandle and viciousness done to them. Getting a charge out of an intense job in the general public makes a lady enabled.

### **PREVIOUS INITIATIVES BY COMMUNITY RADIO STATIONS**

Namma Dhvani (our voices), is the India's first Community Radio station, which began broadcasting in Karnataka in 2003 from Budhikote. It is a complete Community Multimedia Center. Through its innovative content and programming strategy this radio station is helping disadvantage women in self-reliance.

Another pioneer in the field of Community Radio is Sangham Radio launched in Telangana (earlier Andhra Pradesh) on World Rural Women's Day in 2008. Deccan Development Society, the NGO that works with the group of volunteers gives voice to the disadvantage group of scheduled caste women. This radio claims to operate solely by scheduled caste women from rural areas.

Mandeshi Tarang, a Community Radio Station was set up on December 16, 2008, in Maharashtra by Mann Vikas Samajik Sanstha (MVSS), a NGO working for the strengthening of women in Satara region of Mhaswad and Hubli and Dharwad districts in Karnataka. Mandeshi Tarang is giving pertinent programming which would advance their urban and social life. This radio has empowered them to exhibit their ability and inspired them on different issues including education, wellbeing and so on (Ray, 2009).

Another famous Community 'Radio Namaskar', was started in Orissa on July 11, 2010 by Young India, a civil society association. Presently Radio Namaskar (90.4) is concentrating on neighborhood administration, women empowerment, livelihood security and youth empowerment along with other societal need based issues. The Community Radio has proved crucial in improving the status of women in four dimensions psychological, financial, social, and political.

Anna University, Tamilnadu launched its Community Radio on February 2, 2004 by the name Anna FM. The Anna University radio station is the most renowned Community Radio station and was the first to get a permit

in the country. The listeners of Anna Radio are urban upper and upper middle class from the close-by urban bunches in a 5-10km area of Anna University. This radio has proved instrumental in financial, educational and social empowerment of youth and women through its innovative programming.

Another grounds radio, Holy Cross Community Radio, Tamilnadu was launched on 26th December 2006 by Holy Cross College. The station has eight long stretches of transmission (counting rehash transmission) every day. It covers area of around ten kilometers of Holy Cross college.

### **THE CASE OF ALFAZ-E-MEWAT COMMUNITY RADIO STATION**

In the villages of Nuh District of the state of Haryana, the television sets are hardly in 10 percent of the houses. So, women who do not know how to read and write, listen to the radio for all the information. For the past 5 years, Radio Alfaz-e-Mewat is not only associated with women of the community but also every section of the society. Arti Manchanda Grover, program leader of Radio Alfaz-E-Mewat, points out that the listener can listen to the radio programs broadcast on the mobile anywhere and anytime through the app.

Under the project "Samarth" a collaborative effort has been made for financial empowerment of women in the Mewat region in which the banks and insurance companies have also participated. Canara, HSBC, Oriental Bank of Commerce, Life Insurance Company were part of the project in which the Alfaz-E-Mewat Community Radio station had special programs for financial empowerment of women like creating awareness for banking services etc. "Samarth" has generated financial literacy in the Nuh district to such an extent that now the people have begun to consider banking as vital part of their life.

As part of the project Samarth the Financial Literacy Camp was also organized in the month of December 2017 with the concerted efforts of Community Radio Alfaz-e-Mewat. The villagers were provided information about proper management of their assets. They were also provided with the information on government schemes and how to take advantage of such schemes. More than 400 villagers participated in camps and got benefit of banking facilities. In this financial literacy camp, the officers of Canara Bank, HSBC, OBC and Life Insurance gave details of all facilities like opening of the account, linking the accounts with Aadhar cards and mobile number. The officers also provided the knowledge related to educational loans and startups. The various stalls of the camp provided the information on Prime Minister Jandhan Bima Yojana, Kisan Credit Card, Education Loan etc.

On this occasion, street play by local artists was also done to explain the importance of financial literacy to the villagers in which local artists introduced every family through drama to open accounts in the bank for financial security. Artists tried to explain to the villagers how through the help of banks their children can get higher education and start their own business. It was reported in the camp that rural radio can receive information on various topics related to finance and insurance from the Vittiya Vaani (Financial Voices) program, broadcast from Alfaz-E-Mewat. The Fictional Program on Alfaz-e-Mewat is broadcasted every Thursday at 11.35 in the morning and at 8.35 in the evening. The listeners can ask questions from the experts directly during the program on studio number 9813164542.

### **DISCUSSION AND CONCLUSIONS**

The important aspect of Community Radio is that it gives voice to the community especially women and the marginalized. Community Radio has improved women's self-confidence, generated awareness about pollution, health and hygiene and helped in their personality development. Altogether Community Radio helps in psychological, economic, cultural, political and social upbringing of women. Hence radio can be the source of empowerment of women. It empowers them to fight back the domestic violence, male preference attitudes with men, gives them courage to speak their opinion on all issues, to express their interests. It gives them confidence to live their life. So Community Radio can do wonders if used properly for empowerment of women.

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**ECONOMIC IMPACT OF TOURISM-A STUDY ON AGRA CITY**

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**ABSTRACT**

*The Tourism Industry in India has flourished in the past few years and is a major contributor to the Development of the nation. It contributes to increase the Gross Domestic Product, Foreign Exchange Earnings and Employment. Due to various historical monuments, Agra is an important tourist attraction point for domestic as well as foreign tourists to India. Taj Mahal, which is one of the Seven Wonders of the World, is situated in Agra but tourism promotion is not up to the mark. Tourist faces many problems while visiting Agra during their journey. This creates dis-satisfaction among them and leads to word of bad mouth publicity. For the past few years, Government of India has undertaken various steps to promote tourism, but in Agra there is a need to make infrastructural changes to develop tourism and increase the economic growth. This paper, through the light on aspect of tourism, its economic impact and barriers of tourism development in Agra city. It provides some valuable suggestions to the government for making further improvements by finding out the major problems faced by tourist and reasons of lacking in economic growth to promote tourism. This paper also helps to create awareness regarding different historical places among people.*

*Keywords: Tourism, Economic Impact, Agra, TajMahal*

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**INTRODUCTION**

Tourism has emerged as an important sector of the world economy. It has become a major workforce in global trade. It has been making a revolutionary and significant impact on the world economic environment. Tourism has been considered as the major export industry in the world. The multifaceted nature of this industry makes it more important for the development of the country. It does not need high capital and labor and has economic multiplier and it offers an opportunity to earn foreign exchange at low cost. Tourism industry works as a powerful medium of both economic and social changes. It stimulates employment and investment and helps to alter the structure of an economy, major contribution toward foreign exchange earnings and improving the balance of payment. The total income earned from tourism is a number of times more than the actual cost. Tourism is not only limited to economic development, but it also includes social, cultural, educational and political significance. Marketing and promotion are two elements which have vital importance in tourism sector due to increased competition in the tourism industry. Tourism sector creates different types of employment like direct, indirect and induced employment. It produces a highly qualified and trained manger of star hotels to room boys, sales girls and artisans. With this faster growth more opportunity of employment have been opened up for the youth of the developing countries.

In developing countries like India tourism has become one of the important sectors of the economy, It contributesto a large proportion of the National Income and generate huge employment opportunities which results in the development and growth of the country. Now, tourism has become the fastest growing service industry in the country with great potentials for further growth and expansion. It is linked with several sector of an economy in direct or indirect way. On the other hand tourism has both positive as well as negative impact on economic, social, political and the environment face of India, but these negative impacts like increasing waste and pollution can be minimized by taking appropriate measures.

**ROLE OF TOURISM IN ECONOMIC DEVELOPMENT**

Tourism today is one of the fastest growing industries all over the world. A large number of developing countries today are aware of the benefit of tourism. The economic value of tourism to an economy is measured by its contribution to the national income, the earnings of foreign exchange, its contribution to the state revenues & the creation of employment. The importance of earnings for developing countries is, however, much more felt than those for developed countries. Although tourism is sensitive to the level of economic activity in the tourist generating countries, it provides more stable earnings than being provided by primary products.

Tourism is thus the most important source of income for many countries. For instance, newly emerging countries in such areas as the Caribbean depend very heavily on tourist income, which often represents the major part of the gross domestic product (GDP).

Tourism as a source of income is not easy to measure, at least with any degree of accuracy, the reason being of the multiplier effect (Clarke et al, 2009; Brida et al, 2010; Rastegar, 2010). The flow of money generated by tourist spending multiplies as it passes through various sections of the economy through the operation of the

multiplier effect (Dritsakis, 2008; Boopen, 2006). Tourism not only creates jobs but it also encourages growth in the primary and secondary sectors of industry. This is known as the multiplier effect which in its simplest form is how many times money spent by a tourist circulates through a country's economy.

India as a tourist destination has an immense attraction of its own various angles. It is a land full of mysteries with the grandeur of its untouched mountains, the majesty of its age-old monuments.

**OBJECTIVES OF THE STUDY**

1. To study the various attraction spot in and around Agra city.
2. To find out the trend of tourists arrival in these places.
3. To explore strengths, weaknesses, opportunities and threats of Agra tourism.
4. To suggest measures to Ministry of tourism, Government of India to boost foreign as well as domestic tourist arrivals based on SWOT Analysis

**ECONOMIC IMPACT OF TOURISM IN AGRA**

True benefits of tourism can only be appreciated on a broad basis, which include not only economic aspects but also social and cultural aspects. The impacts made by tourism depend upon the volume and profile characteristic of the tourists (their length of stay, activity, mode of transport, travel arrangements, etc.). There may be negative effects, environmental and ecological effects, etc. Tourism can play a vital role for international understanding and keeping peace in the world by developing social, cultural, economic as well as political understanding among the people of different nations and by way bringing diverse people face to face. Thus in the modern day world which is characterized by strikes, problems and misunderstanding, tourism can bring people together and promote harmony and understanding.

Tourism has been recognized as a significant factor in the economy of many nations. It is the biggest foreign exchange earner for countries like India, Thailand and Spain. The net income generated in a country by tourism will vary directly with the expenditure of visitors in the host country and on the other side an increase in expenditure on tourism abroad by the nationals of a country lowers the national income.

The revenue data available with the Cultural ministry, Government of India, shows that Mughal era monuments attract the highest number of tourists. Union Minister of state for culture and tourism Dr Mahesh Sharma shared the data last year in the Lok Sabha. The data is based on the revenue generated from sale of tickets as entry fee for visiting the monuments. Agra's Taj Mahal generates the maximum revenue.

As per figures, during 2014-2015, Taj Mahal earned Rs 21.23 crore followed by Agra Fort (Rs 10.58 crore), Red fort (Rs 5.974 crore), Humayun's Tomb (Rs 6.355 crore) and Qutb Minar (Rs 10.29 crore).

Details accessed by India Today TV show that the Modi Government continues to pursue UPA Government's policy on restoration and upkeep of these monuments. Figures suggest expenditure incurred after NDA came to power is almost close to the amount spent during Congress rule.

Archeological Survey of India's Agra Circle was allocated Rs 9.57 crore in 2013-14, Rs 14.04 crore in 2014-15 and Rs 12.7 crore in the year 2015-16. Similarly, its Lucknow Circle, which has a number of monuments built by rich Nawabs of Awadh got Rs 9.44 crore in 2013-14, Rs 11.65 crore in 2014-15 and Rs 9.45 crore in the year 2015-16 while the Delhi Circle was allocated Rs 13 crore in 2013-14, Rs 14.99 crore in 2014-15 and Rs 11.76 crore in the year 2015-16.

**TOURISM IN AGRA**

Agra is a city on the banks of the river Yamuna in the northern state of Uttar Pradesh, India. It is 378 kilometres (235 mi) west of the state capital, Lucknow, 206 kilometres (128 mi) south of the national capital New Delhi, 58 kilometres (31 mi) south of Mathura and 125 kilometres (78 mi) north of Gwalior. Agra is one of the most populous cities in Uttar Pradesh, and the 24th most populous in India.

Agra is a major tourist destination because of its many Mughal-era buildings, most notably the Taj Mahal, Agra Fort and Fatehpur Sikri, all of which are UNESCO World Heritage Sites. Agra is included on the Golden Triangle tourist circuit, along with Delhi and Jaipur; and the Uttar Pradesh Heritage Arc, tourist circuit of UP state, along Lucknow and Varanasi. Agra falls within the Braj cultural region.

**TOURISTS ARRIVAL IN AGRA FROM 2011 TO 2015**

YEAR	INDIAN	FOREIGN
2011	6892274	1073473
2012	7815960	1343016

2013	7878513	1235708
2014	8418415	1183313
2015	9466670	1345765

Source: Tourism Stats. 2016



**TAJ MAHAL**

TajMahal is regarded as one of the eight wonders of the world, and some Western historians have noted that its architectural beauty has never been surpassed. The Taj is the most beautiful monument built by the Mughals, the Muslim rulers of India. TajMahal was built by a Muslim, Emperor Shah Jahan (died 1666 C.E.) in the memory of his dear wife and queenMumtazMahal at Agra, India. It is an "elegy in marble" or some say an expression of a "dream." TajMahal (meaning Crown Palace) is a Mausoleum that houses the grave of queenMumtazMahal at the lower chamber. The grave of Shah Jahan was added to it later.

**Tourist Arrival at TajMahal**

YEAR	INDIAN	FOREIGN
2011	4604603	692332
2012	5234200	790616
2013	5094432	740910
2014	5377796	694467
2015	5842287	671256

Source: Tourism Stats. 2016



**AGRA FORT**

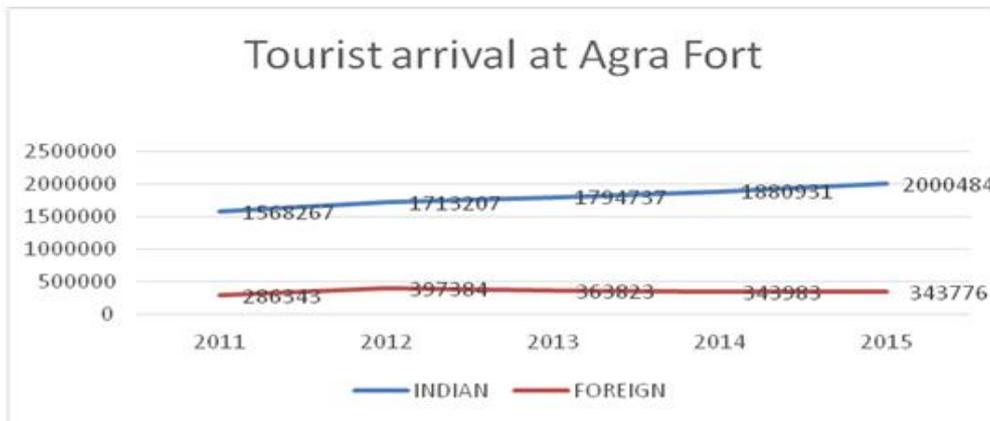
Though Agra is more famous world over as the city of Taj, Agra Fort is another dimension to the city that attracts tourists in hordes. Built by Akbar in Red Sandstone when he was through with the consolidation of his power after accession to power in 1654, Agra Fort worked both as a military strategic point as well as the royal residence. Many of the palaces inside the fort were later added by next generations of Mughal Emperors like Jahangir and Shahjahan.

Built by Akbar in Red Sandstone when he was through with the consolidation of his power after accession to power in 1654, Agra Fort worked both as a military strategic point as well as the royal residence. Many of the palaces inside the fort were later added by next generations of Mughal Emperors like Jahangir and Shahjahan.

**Tourist arrival at Agra Fort**

YEAR	INDIAN	FOREIGN
2011	1568267	286343
2012	1713207	397384
2013	1794737	363823
2014	1880931	343983
2015	2000484	343776

Source: Tourism Stats. 2016



**FATEHPUR SIKRI**

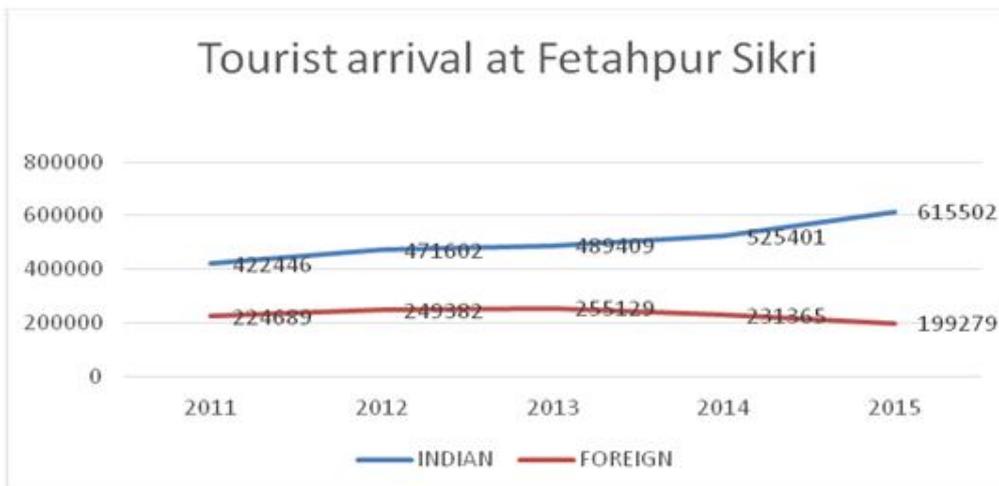
16 kms from the city of Agra, stands FatehpurSikri, Akbar’s capital. FatehpurSikri was built during 1571 and 1585. FatehpurSikri is one of the finest examples of Mughal architectural splendour at its height. Though the city is in ruins, it is a place to visit if one comes to Agra. But in real terms FatehpurSikri is a place where one should spend some time. The sunset over the ruins is sight to cherish.

FatehpurSikri is the best example of the culmination of Hindu and Muslim architecture. FatehpurSikri Mosque is said to be a copy of the mosque in Mecca and has designs, derived from the Persian & Hindu architecture.

**Tourist arrival at FatehpurSikri**

YEAR	INDIAN	FOREIGN
2011	422446	224689
2012	471602	249382
2013	489409	255129
2014	525401	231365
2015	615502	199279

Source: Tourism Stats. 2016



**SIKANDARA**

This monument is only 13 km. from the Agra Fort. Akbar who ruled over the Mughal Empire from 1556 to 1605, began building his mausoleum in the spartan style of Timurid architecture. The mausoleum was completed by his son, the next Mughal Emperor, Jahangir, who added more decorative elements to the design of Akbar's tomb in Sikandra.

The entrance to Akbar's tomb in Sikandra is under a huge arched gateway, similar to the BulandDarwaza at FatehpurSikri. There are beautiful calligraphic inscriptions on the white marble front of the gate. As you enter the gate you will see a formal garden in the charbagh tradition, and the tomb of Akbar situated at the center. Within the same complex is another sober tomb made of red sandstone, which contains the grave of Akbar's wife Mariam, the mother of Jahangir.

**Tourist Arrival at Sikandra**

YEAR	INDIAN	FOREIGN
2011	438597	54288
2012	529645	55922
2013	476768	42313
2014	482042	42093
2015	471009	29662

Source: Tourism Stats. 2016



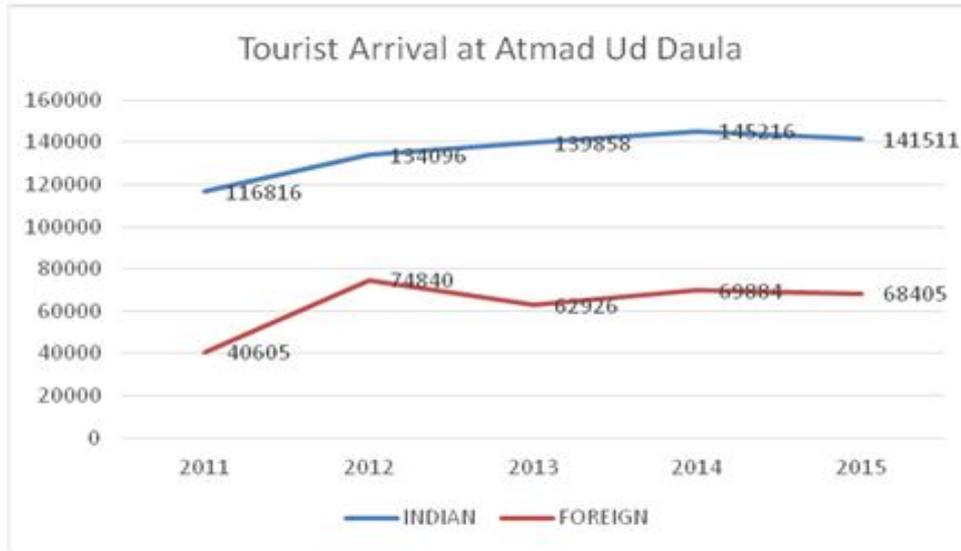
**ITMAD-UD-DAULA**

Itmad-ud-Daula is the tomb of MirzaGhiyas Beg, a Persian who had obtained service in Akbar's court. The tomb set a startling precedent as the first Mughal building to be face with white inlaid marble and contrasting stones. Unlike the Taj it is small, intimate and, since it is less frequented, has a gentle serenity.

**Tourist Arrival at Itmad-UD-Daula**

YEAR	INDIAN	FOREIGN
2011	116816	40605
2012	134096	74840
2013	139858	62926
2014	145216	69884
2015	141511	68405

Source: Tourism Stats. 2016



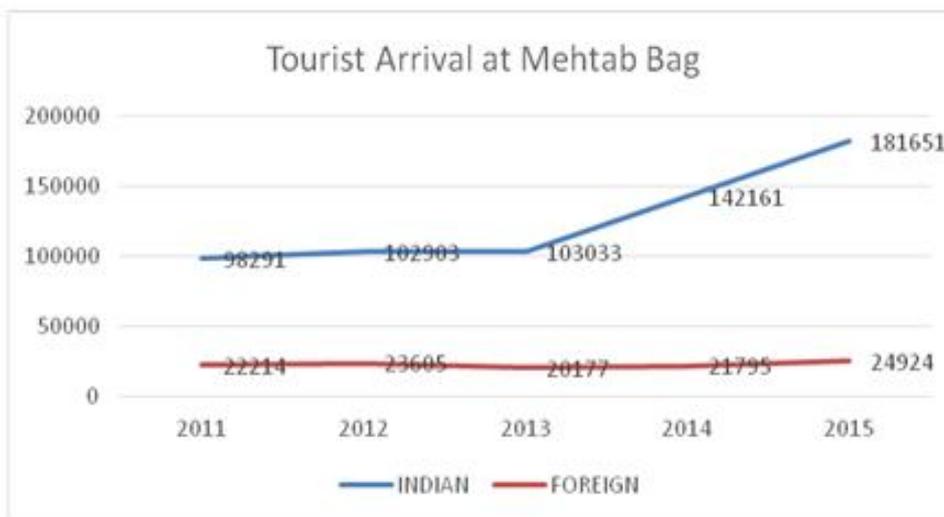
**MEHTAB BAG**

The MehtabBagh garden was the last of eleven Mughal-built gardens along the Yamuna opposite the TajMahal and the Agra Fort; the first being Ram Bagh. It is mentioned that this garden was built by Emperor Babur. It is also noted that Emperor Shah Jahan had identified a site from the crescent-shaped, grass-covered floodplain across the Yamuna River as an ideal location for viewing the TajMahal. It was then created as "a moonlit pleasure garden called MehtabBagh." White plaster walkways, airy pavilions, pools and fountains were also created as part of the garden, with fruit trees and narcissus. The garden was designed as an integral part of the TajMahal complex in the riverfront terrace pattern.

**Tourist Arrival at Mehtab Bag**

YEAR	INDIAN	FOREIGN
2011	98291	22214
2012	102903	23605
2013	103033	20177
2014	142161	21795
2015	181651	24924

Source: Tourism Stats. 2016



**TOURIST ARRIVAL AT MARIAM TOMB**

Mariam-uz-Zamani was born a Rajput princess named JodhaBai, the eldest daughter of Raja Bharmal of Amer. She was married to Emperor Akbar in 1562 CE. She was honoured with the title Mariam-uz-Zamani ("Mary of the Age") after she gave birth to Jahangir. She died in Agra in 1623<sup>[5]</sup> and her son Jahangir built a tomb for her in between 1623 and 1627 CE. The tomb is just next to the Tomb of Akbar the Great, the only nearest of all the tombs of his other wives.

YEAR	INDIAN	FOREIGN
2011	23880	234
2012	43685	365
2013	47049	316
2014	57584	292
2015	59668	286

Source: Tourism Stats. 2016



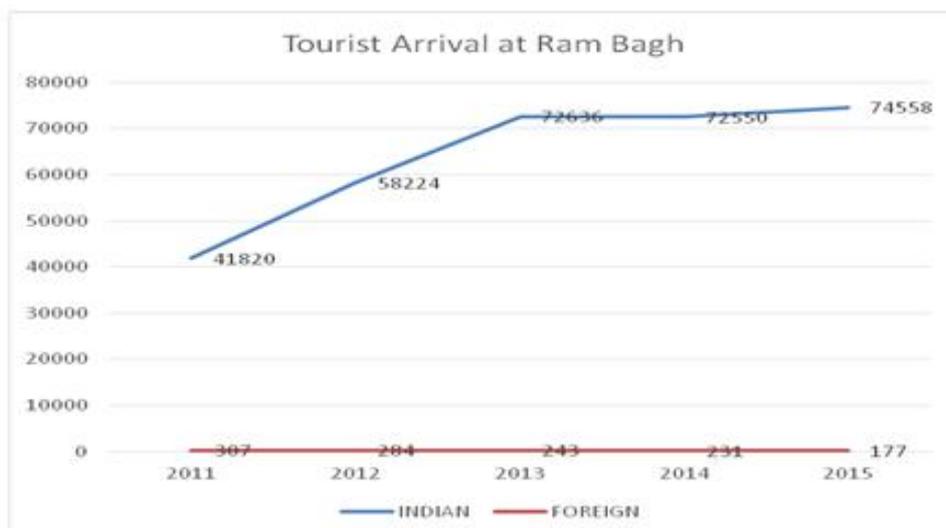
**Ram Bagh**

The oldest Mughal garden in India, the RāmBāgh was built by the Emperor Bābar in 1528 on the bank of the Yamuna. It lies about 2.34 km (1 mi) north of the TājMahal. The pavilions in this garden are designed so that the wind from the Yamuna, combined with the greenery, keeps them cool even during the peak of summer. The original name of the gardens was ĀrāmBāgh, or 'Garden of Relaxation', and this was where the Mughal emperor Bābar used to spend his leisure time and where he eventually died. His body was kept here for some time before sending it to Kabul.

**Tourist Arrival at Ram Bagh**

YEAR	INDIAN	FOREIGN
2011	41820	307
2012	58224	284
2013	72636	243
2014	72550	231
2015	74558	177

Source: Tourism Stats. 2016



**SWOT ANALYSIS OF AGRA TOURISM**

<b>Strengths</b>	<b>Weakness</b>
<ul style="list-style-type: none"> <li>• Low Prices</li> <li>• World famous for TajMahal which is one of the Seven Wonders of the World.</li> <li>• Attractions - Festivals -historical monuments - international art exhibitions - multi- cultural heritage -potential to be international destination</li> <li>• Purpose of visit – explore various cultural and historical places e.g. TajMahal, Agra Fort, FatehpurSikri, Sikandra etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Safety and Security</li> <li>• Maintenance and Cleanliness</li> <li>• Information and Communication</li> <li>• Infrastructure</li> <li>• Facilities -Banking and Financial System - Accommodation Quality - Availability of desired food</li> <li>• Attractions - Shopper’s Paradise - Climate and Weather - Games and Activities - Nightlife - Potential to be international destination</li> <li>• Behavior of Country residents</li> <li>• Purpose of visit - Tourism Infrastructure - Accessibility to tourist spots</li> <li>• Other Factors -Corruption -Terrorism - Begging and Cheating, Eve Teasing</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Shift of the global foreign tourists arrivals from developed economies to emerging economies</li> <li>• High potential for the development of online services.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of Manmade attractions gives an edge to the competitors.</li> <li>• Frequent Communal Riots</li> <li>• Frequent depreciation of Rupee</li> <li>• Continuous threat of terrorists attacks</li> <li>• Poor implementation of government policies.</li> </ul>

**SUGGESTIONSS**

1. To provide for effective marketing and advertisement of Agra as a global tourist destination through promotional campaigns.
2. Adequate and hygienic toilet, bathroom and urinal facilities are required at heritage sites. These facilities also need maintenance and cleanliness.
3. Primary HealthCare: Every tourist spot should be equipped with a primary healthcare centres to provide first aid and amenities to minimize stress and fatigue relief.
4. Bank and ATM facilities: Most tourist locations require Bank and ATM facilities. Nationalized banks can be directed to provide ATM facilities nearby heritage/tourist sites.
5. Persons performing unclean acts can be fined for such purposes. Indian tourism department should frame surveillance and penal code that should authorize the specific persons at respective tourist spots to impose and collect penalties and fines from those who are damaging the tourist spots or creating unclean environment.
6. Another issue with an adverse effect on Agra tourism is its widespread environmental pollution. Air quality throughout Agra is notoriously bad, since there are no curbs on emissions and law enforcement to prevent gross polluters. Respiratory infections are common, especially among sensitive individuals or those with allergies. Additionally, air pollution is beginning to show its effects on prominent tourist landmarks, such as Agra's TajMahal. In recent years, toxic air has damaged the ancient marble of the monument, jeopardizing its beauty and requiring significant repair. Measures should therefore be initiated for strict enforcement of provisions of Environmental Protection Act and the latest amendments made therein.
7. More efforts have to be laid in by the Government of India to provide adequate safety of foreign tourists especially for the female visitors.

**CONCLUSION**

Agra which is endowed with a treasure of beauty spots-historical as well cultural could not boast of a healthy inflow of foreign tourists. Tourism industry holds a great potential to flourish in India provided its cultural and historical legacy is properly taken care of. Therefore the ministry of tourism can analyze the strengths and weaknesses of Agra tourism industry and also explore the favorable opportunities coming its way and minimize the effects of the threats posed so that Indian tourism industry can be benefitted from it. As the SWOT

highlights have also revealed in their study that there will be a shift in global trend of foreign tourist arrival from advanced economies to emerging economies and Agra being a part of the latter should therefore be ready enough to grab the fruits of this opportunity coming its way.

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**COMPARATIVE STUDY ON SEGMENTAL REPORTING: WITH SPECIAL REFERENCE TO  
HINDUSTAN UNILEVER LIMITEDz**

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**ABSTRACT**

*The paper tends to discuss the topic of Segmental Reporting, its meaning and where is it applicable. The paper then delves into the objectives of Segmental Reporting and how is it useful to the users of financial statements.*

*The paper then describes as to all the things that are required to be included in the Segment Report.*

*The paper further discusses some impertinent key concepts of segmental reporting like segment revenue, segment assets, segment liability, segment result and segment expenses and how it is further bifurcated into business segment and geographical segment and how the reporting is further accentuated by classifying the method of the same into primary as well as secondary method of reporting.*

*The paper at last discusses the segment report of HUL(Hindustan Unilever Ltd.) and draws inferences as to where the growth was moderate and where was it robust and also makes a note on locatable and unlocatable corporate assets and corporate liabilities.*

*Keywords: Segmental Reporting, HUL, Corporate Assets, Corporate Liabilities.*

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**WHAT IS SEGMENTAL REPORTING?**

- **Reporting of the operating segments** of a company in the disclosures **accompanying its financial statements.**
- Under Generally Accepted Accounting Principles (GAAP), an operating segment **engages in business activities from which it may earn revenue and incur expenses** and whose **results are regularly reviewed** by the entity's chief operating decision maker for **performance assessment and resource allocation decisions.**
- **Required for publicly-held entities**, not required for privately held ones.
- Intended **to give information to investors and creditors regarding the financial results and position of the most important operating units of a company**, which they can use as the basis for decisions related to the company.

**OBJECTIVES OF SEGMENTAL REPORTING**

The objective of financial reporting is to establish principles for reporting financial information, **about the different types of products and services an enterprise produces and the different geographical areas in which it operates.**

The disclosure of the information in this manner will help the users of financial statements assessing the past records and understanding the past performance and identify the resources that are allocated to support the activities of the organization thus making the financial statements more transparent

- **The information is useful as it helps the users of financial statements to**
  - a) **Better understand the performance** of the enterprise
  - b) **Better assess the risks and returns of the enterprise**
  - c) **Make more informed judgements** about the enterprise as a whole.

**INFORMATION THAT SHOULD BE INCLUDED IN SEGMENTAL REPORTING**

**The information you should include in segment reporting includes**

- The **factors** used to identify reportable segments
  - The **types** of products and services sold by each segment
  - The **basis of organization** (such as being organized around a geographic region, product line, and so forth)
  - Revenues
  - Interest expense
  - Depreciation and amortization
-

- Material expense items
- Income tax expense or income
- Other material non-cash items
- Profit or loss

#### KEY CONCEPTS OF SEGMENTAL REPORTING

- A Segment is an identifiable component of a business subject to risk and returns attached to a component.
- Depending upon the risk and returns attached to each segment of the business , the segments can be classified as :
  - (i) Business Segment
  - (ii) Geographical Segment

#### TERMINOLOGY

**Segment Revenue:** Segment Revenue reported in the statement of profit and loss of an enterprise that is directly attributable to a segment and the relevant portion of enterprise revenue that can be allocated on a reasonable basis to a segment, whether from sales external customers or from transactions with other segments of the same enterprise.

**Segment Result:** Segment result is Segment revenue less segment expenses.

**Segment Expenses:** Segment Expense is an Expense resulting from the operating activities of a Segment that is directly attributable to the segment and the relevant portion of an expense that can be allocated on a reasonable basis to a segment, including expenses relating to sales to external customers and expenses relating to transactions with other segments of the same enterprise.

**Segment Assets:** Segment Assets are those operating assets that are used by a segment in its operating activities and that either are directly attributable to the segment or can be allocated to the segment on a reasonable basis.

**Segment Liabilities:** Segment Liabilities are those operating liabilities which result from the operating activities of a division and either are directly attributable to the division or can be allocated to the division on a reasonable basis.

#### BUSINESS AND GEOGRAPHICAL SEGMENT

- A **business segment** is a distinguishable component of an enterprise that is engaged in providing an individual, product or service or a group of related products or services and that is subject to risks and returns that are different from those of other business segments.
- A **geographical segment** is a distinguishable component of an enterprise that is engaged in providing products or services within a particular economic environment and that is subject to risks and returns that are different from those of components operating in other economic environments.

#### PRIMARY AND SECONDARY REPORTING SEGMENT

The categorization essentially depends upon the **risks and returns** associated with **each segments**.

- If **risks and returns** of an enterprise are **affected predominantly** by **differences in products and services** it would be **primary segment** and the **geographic segment would be the secondary** and vice versa.
- In case the risks and returns of the enterprise are **equally dominated** by both geographic as well as business segment, then **business segment** would be considered as **primary segment**.

#### INTRA COMPARATIVE STUDY ON HINDUSTAN UNILEVER LIMITED

##### About the organization

**Hindustan Unilever Limited (HUL)** is a consumer goods company based in Mumbai, Maharashtra. HUL's products include foods, beverages, cleaning agents, personal care products and water purifiers. It is a whole & sole Indian Company which has been merged with a foreign company and is a subsidiary of Unilever which is a British- Dutch Company.

The company was established in the year 1933 as Lever Brothers and became known as Hindustan Lever Limited because of merger of Lever Brothers, Hindustan Vanaspati Mfg. Co. Ltd. and United Traders Limited.

The company, in the year 2007 was renamed as Hindustan Unilever Limited.

Following is the segmental report of Hindustan Unilever Limited which includes segment wise revenue, results, assets and liabilities for the year ending March 2016 and 2017:

## SEGMENT WISE REVENUE, RESULTS, ASSETS AND LIABILITIES

Particulars	Standalone		Consolidated	
	Audited Results for the Year ended 31st March		Audited Results for the Year ended 31st March	
	2017	2016	2017	2016
<b>Segment Revenue (Sales and Other operating income)</b>				
- Home Care	11,346	10,813	11,346	10,813
- Personal Care	16,304	16,011	16,432	16,128
- Foods	1,124	1,096	1,124	1,096
- Refreshments	4,848	4,482	4,848	4,475
- Others (includes Exports, Infant & Feminine Care etc.)	819	1,052	1,960	2,066
<b>Total Segment Revenue</b>	<b>34,441</b>	<b>33,454</b>	<b>35,710</b>	<b>34,578</b>
<b>Segment Results (Profit before tax and interest from ordinary activities)</b>				
- Home Care	1,259	1,053	1,260	1,053
- Personal Care	3,848	3,802	3,852	3,801
- Foods	85	111	85	111
- Refreshments	755	679	755	679
- Others (includes Exports, Infant & Feminine Care etc.)	(21)	9	200	235
<b>Total Segment Results</b>	<b>5,926</b>	<b>5,654</b>	<b>6,162</b>	<b>5,879</b>
Less: Finance Costs	(22)	(15)	(35)	(17)
Add/(Less): Finance income and Other unallocable income net of unallocable expenditure	492	307	349	164
<b>Total Profit Before Tax from ordinary activities</b>	<b>6,396</b>	<b>5,946</b>	<b>6,466</b>	<b>6,026</b>
<b>Segment Assets</b>				
- Home Care	1,892	1,781	1,892	1,781
- Personal Care	4,097	3,279	4,456	3,580
- Foods	300	319	300	319
- Refreshments	1,542	1,664	1,542	1,664
- Others (includes Exports, Infant & Feminine Care etc.)	164	192	633	712
- Unallocable corporate assets	6,756	6,685	6,883	6,738
<b>Total Segment Assets</b>	<b>14,751</b>	<b>13,920</b>	<b>15,706</b>	<b>14,794</b>
<b>Segment Liabilities</b>				
- Home Care	2,337	2,045	2,337	2,045
- Personal Care	3,815	3,437	3,851	3,466
- Foods	254	286	255	286
- Refreshments	807	777	807	777
- Others (includes Exports, Infant & Feminine Care etc.)	74	63	300	292
- Unallocable corporate liabilities	974	1,033	1,390	1,335
<b>Total Segment Liabilities</b>	<b>8,261</b>	<b>7,641</b>	<b>8,940</b>	<b>8,201</b>

**CONCLUSION OF THE REPORT****Homecare: Growth driven by premium segment**

In this area, growth was driven because **surf** maintained its sales momentum. In household care, **Vim liquid** continued its strong performance and **water sales** also witnessed strong growth.

**Personal care: Growth in both the areas that is personal wash and personal products**

Personal wash performance improved as prices and input costs was stabilized, **Pears and Dove** led the category growth. Skin care saw strong growth because of **Fair and Lovely relaunch**. **Hair care products** witnessed double digit growth, **Lakme Colour Cosmetics** continued its strong growth because of its innovation and performance in deodorants was led by **Axe**.

**Foods: Modest growth in packaged food**

This category grew modestly in comparison of previous years. The focus continued to be on the market development for this category and **Kissandid** well as one of the products.

**Refreshments: Robust growth sustained**

**Tea** maintained its double digit growth. **Lipton Green Tea** and **Brook Bond Natural Care** registered high growth on sustained market development. In coffee, **Bru Gold** continued to drive premiumization, **Ice cream and Frozen Desserts** show another robust innovation led growth

**NOTES**

- **Segment revenue, results, assets and liabilities represent** amounts identifiable to each of the segments.
- Other **“unlocatable income net of unlocatable expenditure”** mainly includes interest, dividend, income from current investments (net), expenses on common services not directly identifiable to individual segment, corporate expenses and exceptional items.
- **Unlocatable corporate assets less unlocatable corporate liabilities** mainly represent investment of surplus funds and cash and bank

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**ANALYSIS OF RELATIONSHIP BETWEEN RATE OF INTEREST AND PROFITABILITY:  
PERSPECTIVES IN INDIAN BANKING EXPERIENCE**

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**ABSTRACT**

*The paper titled "Analysis of Relationship between Rate of Interest and Profitability: Perspectives in Indian Banking Experience" examines the association between lending rate of bank and its profitability. Interest rates have high impact on both GDP and inflation. Higher the rate, higher is the cost of capital and contributes to slowdown investment in the economy. High interest rates also impact foreign direct investment due to the uncertainty in the exchange rate as the market expect interest rates to eventually fall. Interest rate is the most significant mechanism of the cost of capital of companies and ambiguity of this variable only amplifies overall uncertainty in which investment decision have to be made. The main aim of this paper is to examine the effect of interest rate of bank on its profitability. The profitability of bank depends on various factors, but this paper provides overview that interest rate has greater impact on it. The profitability of banks is assessed with ROA and ROE and lending rate is assumed as interest rate for five public and private banks each. Findings revealed that each component of private bank has a strong relationship and are statistically significant; this provides evidence that interest rate made positive contributions to the level of profitability of the selected private banks in India. This paper concludes that contributions of each component of profitability to selected banks performance is strong and are statistically significance. Thus, the paper has bridged the gap between economists' belief and work in the literature by establishing a strong and positive contribution of interest rate to selected commercial banks profitability.*

*Keywords: ROA, ROE, Commercial banks, Rate of Interest*

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**INTRODUCTION**

Interest is considered to be very unique factor in financial market. In today's market of liberalization, the worldwide financial markets have led to enhance the instability in the global economy. Therefore a many researchers, practitioners and policy makers have keen interest in the effect of interest rate in banks profitability. Different policies makers would be able to put suitable weight of the interest rate strategy by considering various factors in the stability of economic growth. As a result, the dissertation project is beneficial to know the interest rate effect on banks profitability in the India banking sector by using regression technique.

**WHEN INTEREST RATE OF BANK INCREASED**

Bank profit are expected to increase after increased in interest rate as they hold huge cash reserves that gain from higher yield which result increased in capital and endowment. Also, customer accounts are paid less than short- term rates which helps the banks to pocket the difference. This spread trends to rise throughout the interest rate hike cycle, increase in profit that bank have earned directly goes into banks bottom lines.

Increased in interest rate also tend to occur during strong economic expansions and periods of rising bond yields. These elements in favor of banks tom increased lending and capital utilization, with a surge in business and consumer loans adding to bank profits.

**WHEN INTEREST RATE OF BANK DECREASED**

The main effect on bank due to lower rate of interest is that consumer will take more loans for their personal use like- house loan, car loan which helps to develop the economy growth. Bank will able to create the relationship with its customer to provide the loan at minimum level.

Recently due to demonetization, the interest rate has been decreased which helps in increase in the efficiency of the Indian economy. Money which was ideal earlier is now in the banks, where it can and will be lent out. Thus this would expect to boost economic growth.

The Reserve Bank of India (RBI) can modify interest rates anytime for macroeconomic reason. But the repo rate (perhaps not accurately the right rate to look at but good enough) has not changed since October 2016. Therefore, it is a microeconomic change, not a macro one. The banking system is just changing less

It is that flow of cash in which is leading to the decrease of the price going out. Every banks has cut down their interest rate as highly amount of cash comes into their banks accounts. Due to the demonization, an overflow of cash into the banks into deposits means that the banks will have to cut their margins to get those deposits back out the door again as loans. Impact of this has been seen on various bank like SBT and IDBI cut their lending

rates, the interest rate has been decreased which helps is now in the banks, where it can and will be lent out. Thus this would expect to boost economic growth.

To measure the effect of changes in banks profitability, it is important to evaluate and assess the overall fluctuations of interest rate on the economy and to depict the implications of interest rate on cash flow. According to our research area (India)

The study focuses the overall impact of interest rate on commercial banks profitability.

### **WHY INTEREST RATES ARE IMPORTANT FOR AN ECONOMY?**

Amongst all the rates given, it is Repo rate which influenced most the given funds supply in the economy. Repo rate is the rate at which the banks have a loan of short-term funds from the RBI. It is secured in nature of borrowing similar to a loan against fixed deposits which is availed by individuals during emergencies. RBI increase repo rate to increase the overall cost of funds in the banking system.

Higher costs will keep in check the required demand for funds. If central bank increased the repo rate, then it becomes costly for banks to borrow money from RBI and in turn increase the loan interest rates at which customers borrow money from them to compensate for the increase in the repo rate.

Interest rates have high influence factor on both growth and inflation. Higher the rate, higher is the cost of capital and contributes to slowdown investment in the economy. Interest rate plays significant factor in determine the economic environment in which investment has to take place, especially when many companies are not rich. High interest rates also impact foreign direct investment due to the uncertainty in the exchange rate as the market expect interest rates to eventually fall.

Lower the rate, higher is the supply or flow of money in the economy and greater purchasing power of individuals or person. This will result in rise in the price of goods, since there is more demand than supply of the goods. Manipulating interest rates thus creates a difference in growth and inflation in the economy.

Thus Interest rate is the most significant mechanism of the cost of many companies and ambiguity of this variable only amplifies overall uncertainty in which investment decision have to be made. RBI has to maintain a balance between above two factors which runs the economy. RBI interest rate policy can help reduce uncertainty.

### **CURRENT INDIAN SCENARIO**

The global recent economic activities have slow and risk remain high, most recently on account of in security over policies of systemic central banks. On the domestic front, macroeconomic conditions remain weak as expectation, along with supply constraints, Domestic demand and weak investment sentiment.

Due to the incredible economic growth of India over the recent years as compared to other nations, increase in foreign money inflow caused the demand in multiples in India. Inflation has moderated as expected, however the depreciation in rupee value and imbalances in the product market pose a big challenge. Given that foodstuff price are still high, the inflation figures will be influenced by the ordinance passed for the food security bill.

### **COMPARISON WITH OTHER ECONOMIES**

Various steps had been taken by other developing nations in order to manage their monetary policy and economy. Among all the developing nations, Indonesia responded to outflows and market volatility by all of a sudden raising interest rates-the first Asian central bank to do so since 2011 in a bid to maintain its currency, while Brazil said that it would scrap a tax on foreign exchange derivatives as the actual weakened. Other developing countries with large foreign financing needs such as South Africa and Poland countries with large foreign financing needs such as South Africa and Poland are also seen at their risk.

If we look towards the current scenario of developed nation, they have very low interest rate as compare to developing nation. US fed has reserved its fund rate to as low between 0-0.25%, Japan's have between 0-0.10% whereas European Central Bank has kept its interest rate to 0.5%. This shows to attain growth we need to keep the rate low, but the central bank must have full control on money supply in order to curb high inflation.

### **HISTORY OF BANKING SECTOR**

Banking sector is the backbone of economy of country like India. And since the initiation of first Bank of India, it has undergone various major changes from time to time. For a Banking applicant it is important to know about the timeline of measures in Banking Sector. Cash makes the mare go is an old saying which is relevant even today.

In India, reference about banks and policy were even found in our scriptures and ancient texts. Debt (loan) is even mentioned in Vedic literature. Banking product is also found quoted in Chanakya's Arthashastra. Shifting to modern day banking system, the concept of bank is laid by the people of Italy under the name Banco.

**The improvement in the Indian banking system is divided into 3 distinct phases**

- The pre-improvement phase – before 1947
- Second phase - 1947 to 1991
- Third phase – 1991 and afterwards

**PHASE – 1**

This stage is described by the presence of a colossal number of banks (more than 600). Managing an account industry initiated in India with the built up of Bank of Hindustan in Calcutta (now Kolkata) in 1770 which stop to work in 1832.

**After that various banks came however some were not fruitful like**

- General Bank of India – (1786-1791)
- Oudh Commercial Bank was the main business bank of India (1881-1995).

**Whereas some are thriving and keep on leading even now like**

- Allahabad Bank (built up 1865)
- Punjab National Bank built up in 1894, with HQ in Lahore.
- Bank of India (built up 1906)
- Bank of Baroda (built up 1908)
- Central Bank of India (built up 1911)

**While some other case**

Bank of Bengal (built up 1806), Bank of Bombay (set up 1840), Bank of Madras (set up 1843) consolidated into a solitary element in 1921 which came to be known as Imperial Bank of India.

Note: Imperial Bank of India was later on renamed in 1955 as the State Bank of India.

In April 1935, Reserve Bank of India was made in light of the proposal of Hilton Young Commission (setup in the 1926).

In this day and age, for the most part of the bank were minor in size and experience the ill effects of high rate of disappointments. As a result open affirmation is low in these banks and store activation was moderate. Individuals kept on relying upon sloppy segment (moneylender and indigenous brokers).

**PHASE II**

Comprehensively the principle particular element of this stage is the nationalization of bank. With the viewpoint of monetary arranging , nationalization rise as the successful measure.

Why is requirement for inclusion of nationalization in India:

- The banks for the most part took into account the requirements of expansive industry and huge business houses.
- Sector like agribusiness, little scale businesses (SSC) and fares were falling behind.
- The poor masses constant to be misused by the moneylenders.

Taking after this, In the year 1949, first January the Reserve bank of (RBI) was nationalized and 14 business banks were nationalized in nineteenth July, 1969. Amid 1969 Smt. Indira Gandhi was the executive of India. There were -

- Canara Bank
- Dena Bank
- United Bank
- Syndicate Bank
- Allahabad Bank

- Indian Bank
- Union bank of india
- Bank of Maharashtra
- Indian Overseas Bank

**Also, 6 business bank were nationalized in April 1980. These were**

- Andhra Bank
- Corporation Bank
- New Bank of India
- Oriental Bank of Commerce
- Punjab&sindh Bank
- Vijaya Bank

Note; In 1993, New Bank of India got consolidated with Punjab National Bank.

Meanwhile on the suggestion of M.Narsimhan panel, Regional Rural Banks (RRB) were framed on October 2, 1975. The reason behind the arrangement of RRBs was to serve up vast unserved populace of rustic territory and advancing budgetary incorporation.

With a view to meet the distinct necessity from the diverse part like-farming, lodging, Foreign exchange, industry, some pinnacle level saving money foundations were likewise set up like

- NABARD (set up 1982)
- EXIM (set up 1982)
- NHB (set up 1998)
- SIDBI (set up 1990)

#### **Effect of Nationalization**

- Improved skill in the keeping money framework – since people in general certainty got supported.
- Sector like Agriculture, Small and Medium ventures began getting stores – prompted monetary development.
- Increased entrance of Bank office in the rustic territory.

#### **PHASE III**

This period saw a remarkable development during the time spent change of keeps money with the advancement of monetary strategies. Indeed, even after nationalization, the ensuing standards that took after, a vast part of masses are not touched by the saving money administrations.

In perspective of this, in 1991, the Narsimhan board of trustees gave its recommendation i.e. to permit the passageway of private players into the keeping money framework. Taking after this RBI offered permit to 10 private banks, which are-ICICI, HDFC, Axis Bank, IndusInd, DCB.

In 1998, the Narsimhan board prescribed section of more private players. Therefore RBI offered permit to the accompanying Kolkata Mahindra Bank (built up in 2003) , Yes Bank (built up in 2004)

In 2003-14, third round of bank permitting occurred. What's more, in 2014 IDFC bank &Bandhan Bank rose.

So as to further money related addition, RBI additionally proposed to set up two sort of bank – installment Bank and Small Bank.

This phase for the Indian managing an account has been appropriately set up, with foreseen unwinding of standards for Foreign Direct Investment (FDI). All remote speculator ,who has put resources into bank might be given voting rights that could go over the present top of 10% at present, it has run up to 74% with some limitation and direction.

The new approach shook the India in managing an account area totally, illustration Bankers were utilized to the 4-6-4 recipe ( acquire @ 4%; loan @6%;go home @4) of working. The new wave changed the example in a cutting edge standpoint and well informed strategies for working for conventional banks. This prompted the

retail blast in India because of managing an account area. Individuals expected more from their banks and get more.

By 2010, managing an account segment framework in India was normally genuinely develop regarding supply, item assortment and reach-despite the fact that range in country India still remains a con front for the private bank and outside banks. Regarding the nature of advantage and adequate capital in India, banks are measured to have perfect, solid and evident monetary records with respect to different banks in correlation of economies in its locale. The Reserve Bank of India (RBI) is an autonomous body, with slightest weight from the administration.

With the advancement in the Indian economy anticipated as solid for a long while particularly in the administrations division industry interest for managing an account administrations, retail saving money, home loans and speculation administrations are exceptionally anticipated that would be solid. One can likewise expect Merger and Acquisition, assume control, Asset deals.

In walk 2006, the RBI enabled Warburg Pincus to rise its stake in kotak Mahindra Bank (private bank) to 10%. This is the first run through a speculator has been allowable to hold over 5% in a private bank since the RBI report standards in 2005 that any stake surpassing 5% in the private banks would should be confirmed by them.

By 2013, the saving money Industry in India utilized 1175149 workers and had a sum of 109811, branch in India and 171 abroad and deal with an aggregate stores of 67504.54 billion (us\$1.0 trillion ) and bank credit of 52604.59 billion (us\$780). The net benefit of the banks which was working in India was 1027.51 billion (us\$15) against an aggregate turnover of 9148.59 billion (US\$140 billion) for the money related year 2012-13.

### **SOME KEY ACTUALITIES**

- Allahabad bank (set up in 1865)- Allahabad Bank is the most seasoned open area bank in India having branch all over India and serve the clients for the past 145 years.
- Imperial Bank of India was renamed in 1955 as the State Bank of India.
- The first Bank of India which has the Limited Liability to be overseen by Indian Board was Oudh Commercial Bank. (Set up in 1881 at Faizabad).
- PNB is the primary bank simply oversaw and controlled by Indians, which was set up in Lahore in 1895.
- Truly Swadeshi Bank – Central Bank of India is known as India's first genuinely Swadeshi bank. What's more, was set up in 1911 and completely possessed oversaw and controlled by Indians.
- Union bank of India was introduced by Mahatma Ghandi in 1919.
- The first legislative head of the Reserve Bank was Osborne Smith.
- The first Indian to be the legislative leader of Reserve Bank was CD Desmukh.
- Saving account framework was begun by Presidency Bank in India 1833.
- The first Indian bank to open abroad branch is Bank of India. It established the branch in London in 1946.
- ICICI Bank was the main Indian bank to give web saving money office to its clients.
- Central Bank of India was the principal open bank to acquaint Credit card with its customers.
- ICICI bank is the primary bank to give portable ATM so as to give the hitter administrations.
- Bank of Baroda has the most noteworthy number of abroad branches.

### **FUNCTION OF RBI**

The main function of RBI is to established monetary stability in the country. For this purpose, it is set with independence in formulate and implementing monetary policies in order to maintain the stability in price and sufficient money supply in the system.

RBI takes different expansionary and contractionary steps to attain the same and utilize its tools such as Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Bank rate, Open Market Operation (OMO) and Liquidity Adjustment Facility (LAF) for this.

The use of above function varies the supply of money in the system. Whenever RBI wants to lessen money supply i.e. control inflation in the country it follows contractionary measures, whereas when achieve target growth it takes expansionary measures.

Amongst all the rates given, it is Repo rate which influenced most the given funds supply in the economy. Repo rate is the rate at which the banks have a loan of short-term funds from the RBI. It is secured in nature of borrowing similar to a loan again at fixed deposits which is availed by individuals during emergencies. RBI increase repo rate to increase the overall cost of funds in the banking system.

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### **LITERATURE REVIEW**

How do interest rate changes have an effect on the profitability of the banking sector? (Investopedia).

In this article I have read about the impact of hike interest rate on the banks. There are two main important impact on banks, firstly its helps the banks to increased capital and increase endowment in short term. secondly in long term bed debt may occurred due to hike in interest rate. (Source- investopedia)

A Comparative study on Performance of Indian Public Sector Banks and Private sector Banks; (KajalChaudhary and Monika Sharma)–

In banking system major changes took placed in India only after liberalization, Globalization and privatization. In this research paper, a comparative study has been done between public and private banks. This leads to rise in competition, new information technology and decreasing in processing costs and geographic area boundaries, and fewer restrictive of government regulation have all played a major impact for public sector bank in India to powerfully compete with the Private banks and Foreign bank. Research paper shows how effectively Public bank and Private bank have been managing their NPA. We have used statistical tools for projection of trend. (Source- International Journal of Innovation Management and Technology)

Research paper on the Performance Comparison of Private Sector Banks with the Public Sector Banks in India (GarimaChaudhary Assistant Prof., Guru Gobind Singh Collage for woman)-

Recently the Indian economy has witnessed the appearance of many banks in the private sector. There are many other reason behind the increasing number of commercialization of banks. The expansion of the banks is not achievable unless they witness some accomplishment in the perspective of customer pleasure or the system of each bank both in private and public sector bank. This paper covers the performance comparison of private sector bank.

Study on Interest Rate and Its Effect on Bank's Profitability (Muhammad Faizan Malik, Shehzad Khan, Muhammad Ibrahim Khan, Faisal Khan)

The study is conducted to examine the market interest rate effect on the banks profitability in public and private sector of Pakistan. In this paper, the sample was divided into two parts – 1) public sector banks: comprise of

four nationalized banks and 2) Private sector banks: contain six private sector banks for the study. Bank lending rate were treated as a proxy for interest rate while Return on Assets (ROA) and Return on Equity (ROE) were taken as a productivity of the banks. The results prove that the interest rate has added effects on both ROA and ROE in private banks as compare to the public sector banks.

India's Demonetisation and Interest Rates - Now SBI Cuts By 0.9% Recently due to demonetization, the interest rate has been decreased which helps in increase in the efficiency of the Indian economy. Money which was ideal earlier is now in the banks, where it can and will be lent out. Thus this would expect to boost economic growth. ( Source – Economics times) Banking industry play a key role in the growth of an economy. The growth role undertaken by banking industry determines the step for growth of economy. Hence the stability of banking sector is a key for the growth of an economy. The primary function of bank is mobilize deposits from surplus units to shortage units in the form of loan and advances to variety of sectors such as agricultural, industry, personal and governments. ( Source – Economics times)

Commercial banks are one of those banking sectors which are the important source of financial support to business activities as well as other project throughout the country. They plays important role in the economy by mobilizing deposits from excess units to shortage units in the form of loan and advances. As Daniel and Wandera (2013) they play a important role to rising economies where most borrowers have no access to capital markets. Thus, they considered as an intermediary between the depositors and borrowers.

As numerous literatures shows, there have been an increased number of significant bank problems both at developed and rising economies. Banking sectors can perform worst as a result of inefficient administration, less capital adequacy and poor assets quality. Nonperforming assets is the single largest cause of impatience of the banking sectors (Sontakke and Tiwari, 2013).

In many researchers, the interest rate was usually used to expose the banks financial position. The net margin rate of the bank is very frequently sensitive to fluctuate. In the opinion, Shiller and McCulloch (1987) and Samuelson (1945) the common market situation, the banks profit boost rapidly with hike in interest rate of banks.

Samuelson ( 1945) stated the banking system as a whole is enormously assisted rather than hindered by hike in the interest rate and commercial banks would profit more than saving banks.(Source-Samuelson ( 1945)

Hancock (1985) originated a very significant proof for their study when they observed that with the enhanced of interest rate, the output and employment reduce even at the level of collective.(Source-Hancock (1985)

According to Ben Naceur and Goaid (2008) the impact of particular variable connected to commercial banks of Tunisia in adding up to macroeconomic indicator along with effect of fiscal structure on banks profitability in Tunisia from 1980-2000. They done that capital ratio has positive impact and size has negative effect on profitability. There exists little effect of macro-economic component on the productivity of banks in Tunisia. Improvement in money market has posted result since banks in middle east and north Africa countries have improved their income through the income generated from the intermediation and the supervision of arrangement of stock that compensate the reduced margin to compare the ownership structure.( Source - Ben Naceur and Goaid (2008))

## **OBJECTIVE OF THE STUDY**

The main objective of this project is to analyze the interest rate effect on the Banks profitability. For this, sample was divided into two groups - Public sector banks and Private sector banks. In Public sector Banks; Canara Bank, Punjab National Bank, State Bank of India, Bank of Baroda have taken in the sample. HDFC Bank, ICICI Bank, Yes Bank, IndusInd Bank, Axis Bank have taken from the private banking sector. Banking lending rates have taken as interest rate while ROA and ROE considered as banks profitability. Is there is relationship between these variable or not.

## **RESEARCH METHODOLOGY**

### **Sample**

Sample of the population is based on india. The sample is separated into two categories i.e. Public sector Banks; Canara Bank, Punjab National Bank, State Bank of India, Bank of Baroda were taken in the sample. HDFC Bank, ICICI Bank, Yes Bank, IndusInd Bank, Axis Bank were taken from the private banking sector.

### **Variable**

Return on Asset

The return on assets is treated as the dependent variable of the study. The return on assets has been calculated by the following equation.

$$ROA = \frac{\text{Net income}}{\text{Total asset}}$$

**Return on equity**

The return on equity is also the second dependent variable of the study. The variable is calculated by the following equation:

$$ROE = \frac{\text{Net income}}{\text{Shareholder's equity}}$$

**Other income/Total Asset**

This is also a dependent variable of the study. The variable is calculated by the following equation:

Other Income

Total Asset

**Hypothesis**

H<sub>0</sub>: The interest rate has no significant effect on return of asset of the bank.

H<sub>1</sub>: The interest rate has a significant effect on return of asset of the bank.

H<sub>0</sub>: The interest rate has no significant effect on return of equity of the bank.

H<sub>2</sub>: The interest rate has a significant effect on return of equity of the bank.

H<sub>0</sub>: The interest rate has no significant effect on other income/Total asset on bank.

H<sub>3</sub>: The interest rate has a significant effect on other income/total asset of the bank

**DATA ANALYSIS & INTERPRETATION**

**Public Banks**

**Table-1: Net Income**

Year	Canara Bank	PNB	SBI	BOI	BOB	Net Income
Mar-16	-2670.3	-3663.27	-3663.27	-6334.98	462.09	-15869.7
Mar-15	2858.2	3341.42	3341.42	1748.32	443.56	11732.92
Mar-14	2589.52	3534.61	3534.61	2732.65	430.68	12822.07
Mar-13	2951.83	4927.24	4927.24	2741.19	422.52	15970.02
Mar-12	3247.27	4974.81	4974.81	2674.62	412.38	16283.89
Mar-11	3877.49	4515.59	4515.59	2488.71	392.81	15790.19
Mar-10	2813.96	3890.39	3890.39	1738.56	365.53	12698.83
Mar-09	1892.41	3139.56	3139.56	3009.41	365.53	11546.47
Mar-08	1732.82	2130.32	2130.32	1960.28	365.53	8319.27
Mar-07	1489.33	1556.82	1556.82	1125.95	365.53	6094.45

Source- Dion Global Solution Limited

This table has the net income of all five banks above as given which help us to calculate net income of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROA, ROE.

**Table-2: Total Asset**

Year	Canara Bank	PNB	SBI	BOI	BOB	Total Asset
Mar-16	547516.11	664545.67	664545.67	609913.93	671376.48	3157897.86
Mar-15	486423.61	601946.05	601946.05	618697.76	714988.55	3024002.02
Mar-14	486423.61	549011.74	549011.74	573190.2	659504.53	2817141.82
Mar-13	410309.36	477448.19	477448.19	452602.72	547135.44	2364943.9
Mar-12	372095.07	456744.48	456744.48	383299.57	447321.46	2116205.06
Mar-11	333846.48	376854.5	376854.5	349853.08	358397.18	1795805.74
Mar-10	262608.41	295140.8	295140.8	273537.84	278316.71	1404744.56
Mar-09	217477.64	245404.88	245404.88	223791.46	227406.73	1159485.59
Mar-08	178323.83	197484.66	197484.66	177066.9	179599.5	929959.55
Mar-07	163718.17	162128.65	162128.65	141487.51	143146.18	772609.16

Source- Dion Global Solution Limited

This table has the Total asset of all five banks above as given which help us to calculate Total asset of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROA.

**Table-3: Shareholder Equity**

Years	Canara Bank	PNB	SBI	BOI	BOB	SHAREHOLDER EQUITY
Mar-16	542.99	392.72	392.72	817.29	-5053.09	-2907.37
Mar-15	475.2	370.91	370.91	665.65	3832.69	5715.36
Mar-14	461.26	362.07	362.07	643	4931.24	6759.64
Mar-13	443	353.47	353.47	596.64	4750.48	6497.06
Mar-12	443	339.18	339.18	574.52	5216.29	6912.17
Mar-11	443	316.81	316.81	547.22	21381.21	23005.05
Mar-10	410	315.3	315.3	525.91	17051.49	18618
Mar-09	410	315.3	315.3	525.91	16061.97	17628.48
Mar-08	410	315.3	315.3	525.91	12788.54	14355.05
Mar-07	410	315.3	315.3	525.91	9747.48	11313.99

Source- Dion Global Solution Limited

This table has the Shareholder equity of all five banks above as given which help us to calculate total Shareholder equity of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROE.

**Table-4: Other Income**

Years	Canara Bank	PNB	SBI	BOI	BOB	OTHER INCOME
Mar-16	4875.23	6877.02	6877.02	3652.65	4998.86	26683.92
Mar-15	4550.25	5890.73	5890.73	4232.7	4402	25027.15
Mar-14	3932.76	4576.71	4576.71	4291.84	4462.74	21008.64
Mar-13	3153.01	4215.92	4215.92	3766.04	3630.62	18773.22
Mar-12	2927.6	4202.6	4202.6	3321.17	3422.33	17463.16
Mar-11	2811.46	3612.58	3612.58	2641.77	2809.19	15484.75
Mar-10	3000.82	3565.31	3565.31	2616.64	2806.36	15505.74
Mar-09	2427.1	2919.69	2919.69	3051.86	2757.66	13369.38
Mar-08	2308.31	1997.56	1997.56	2116.93	2051.04	9802.15
Mar-07	1511.8	1343.54	1343.54	1562.95	1381.79	5761.83

Source- Dion Global Solution Limited

This table has Other income of all five banks above as given which help us to calculate total Other income of last ten years from March 2007 to March 2016 which will be beneficial for calculate other income/total asset.

**Public Bank Performance**

**Table-5**

YEAR	Net Income	Total Asset	Shareholder Equity	other income	ROA	ROE	Other income/ Total Asset	INTEREST RATE
Mar-16	-15869.7	3157897.86	-2907.37	26683.92	-0.0050254	5.458438382	0.0084499	13.5
Mar-15	11732.92	3024002.02	5715.36	25027.15	0.003879931	2.052875059	0.008276168	14.5
Mar-14	12822.07	2817141.82	6759.64	21008.64	0.004551446	1.896856933	0.007457431	14.13
Mar-13	15970.02	2364943.9	6497.06	18773.22	0.006752811	2.458037943	0.007938125	13.38
Mar-12	16283.89	2116205.06	6912.17	17463.16	0.007694854	2.355828922	0.008252111	8.9
Mar-11	15970.02	1795805.74	23005.05	15484.75	0.008892955	0.694196274	0.008622731	10.1
Mar-10	12698.83	1404744.56	18618	15505.74	0.009039957	0.682072725	0.011038121	9.98
Mar-09	11546.47	1159485.59	17628.48	13369.38	0.00995827	0.65498954	0.011530441	10.13
Mar-08	8319.27	929959.55	14355.05	9802.15	0.008945841	0.579536121	0.010540405	10.13
Mar-07	6094.45	772609.16	11313.99	5761.83	0.007888141	0.538664963	0.007457626	9.85

In this table we have calculated total ROA, ROE and OT with the help of factors like Net income, total asset, shareholder equity, other income of last ten years from March 2007 to March 2016.

Private Bank

Table-6: Net Income

YEARS	HDFC	ICICI	INDUSIND	AXIS	YES	NET INCOME
Mar '16	12,296.21	9726.29	2286.45	8223.66	2539.45	35,072.06
Mar '15	10,215.92	11175.35	1793.72	7357.82	2005.36	32,548.17
Mar '14	8,478.38	9810.48	1408.02	6217.67	1617.78	27,532.33
Mar '13	6,726.28	8325.47	1061.18	5179.43	1300.68	22,593.04
Mar '12	5,167.09	6465.26	802.61	4242.21	977	17,654.17
Mar '11	3,926.40	5151.38	577.33	3388.49	727.14	13,770.74
Mar '10	2,948.70	4024.98	350.31	2514.53	477.74	10,316.26
Mar '09	2,244.94	3758.13	148.34	1815.36	303.84	8,270.61
Mar '08	1,590.18	4157.73	75.05	1071.03	200.02	7,094.01
Mar '07	1,382.54	3110.22	68.22	659.03	94.37	5,314.38

Source- Dion Global Solution Limited

This table has the net income of all five banks above as given which help us to calculate net income of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROA, ROE.

Table-7: Total Asset

YEAR	HDFC BANK	INDUSIND	AXIS	YES	ICICI BANK	TOTAL ASSET
Mar-16	708,845.57	139676.22	525467.61	165263.42	717877.63	2,257,130.45
Mar-15	590,503.07	108724.91	461932.39	136170.42	646129.29	1,943,460.08
Mar-14	491,599.50	86628.67	383244.89	109015.79	594641.6	1,665,130.45
Mar-13	400,331.90	73093.83	340560.67	99104.12	536794.69	1,449,885.21
Mar-12	337,909.49	57376.74	285627.8	73625.67	473647.09	1,228,186.79
Mar-11	277,352.61	45410.49	242713.37	59007	406233.67	1,030,717.14
Mar-10	222,458.56	35137.89	180647.87	36382.5	363399.71	838,026.53
Mar-09	183,270.78	27395.05	147722.06	22900.8	363300.96	744,589.65
Mar-08	133,176.60	23022.08	109577.84	16982.42	399795.07	682,554.01
Mar-07	91,235.61	20927.15	73257.21	11103.44	344658.11	541,181.52

Source- Dion Global Solution Limited

This table has the Total asset of all five banks above as given which help us to calculate Total asset of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROA.

Table-8: Shareholder Equity

Year	HDFC	ICICI	INDUSIND	AXIS	YES	SHAREHOLDER EQUITY
Mar-16	505.64	1163.17	594.99	476.57	420.53	3160.9
Mar-15	501.3	1159.66	529.45	474.1	417.74	3082.25
Mar-14	479.81	1155.04	525.64	469.84	360.63	2990.96
Mar-13	475.88	1153.64	522.87	467.95	358.62	2978.96
Mar-12	469.34	1152.77	467.7	413.2	352.99	2856
Mar-11	465.23	1152.82	465.97	410.55	347.15	2841.72
Mar-10	457.74	1114.89	410.65	405.17	339.67	2728.12
Mar-09	425.38	1113.29	355.19	395.01	296.98	2585.85
Mar-08	354.43	1112.68	320	357.71	295.79	2440.61
Mar-07	319.39	899.34	320	281.63	280	2100.36

Source- Dion Global Solution Limited

This table has the Shareholder equity of all five banks above as given which help us to calculate total Shareholder equity of last ten years from March 2007 to March 2016 which will be beneficial for calculate ROE.

**Table-9: Other Income**

YEARS	OTHER INCOME	ICICI	INDUSIND	AXIS	YES	OTHER INCOME
Mar-16	11211.65	42102.14	3296.95	9954.98	2712.15	69277.87
Mar-15	9545.68	35252.24	2403.87	8838.11	2046.46	58086.36
Mar-14	8297.5	30084.61	1890.53	7766.25	1721.58	49760.47
Mar-13	7132.96	29319.81	1362.96	6832.8	1257.43	45905.96
Mar-12	5992.32	28663.42	1011.78	5487.19	857.12	42011.83
Mar-11	4585.05	31513.3	713.66	4671.45	623.27	42106.73
Mar-10	4037.08	29053.72	553.48	3964.21	575.53	38184.02
Mar-09	3616.95	28345.55	456.25	2915.93	435.02	35769.7
Mar-08	2298	26436.88	297.58	1751.02	360.67	31144.15
Mar-07	1571.29	17540.25	284.25	986.29	200.71	20582.79

Source- Dion Global Solution Limited

This table has Other income of all five banks above as given which help us to calculate total Other income of last ten years from March 2007 to March 2016 which will be beneficial for calculate other income/total asset.

**Private Bank Performance**

**Table-10**

Year	Net Income	Total Asset	Other Income	Shareholder equity	ROA	ROE	Other income/ Total Asset	Interest
Mar-16	35,072.06	2257130	41,455.33	3160.9	0.015538	11.09559	0.030692896	9.9
Mar-15	32,548.17	1943460	33,987.86	3082.25	0.016748	10.55987	0.029888116	10.5
Mar-14	27,532.33	1665130	31,401.38	2990.96	0.016535	9.205182	0.029883827	10.08
Mar-13	22,593.04	1449885	26,290.95	2978.96	0.015583	7.584204	0.031661789	11.45
Mar-12	17,654.17	1228187	22,775.39	2856	0.014374	6.181432	0.034206385	10.5
Mar-11	13,770.74	1030717	18,648.73	2841.72	0.01336	4.845917	0.040851877	8.9
Mar-10	10,316.26	838026.5	17,388.72	2728.12	0.01231	3.781454	0.045564214	13.65
Mar-09	8,270.61	744589.7	19,802.97	2585.85	0.011108	3.198411	0.048039481	14.4
Mar-08	7,094.01	682554	17,136.70	2440.61	0.010393	2.906654	0.045628843	15
Mar-07	5,314.38	541181.5	15,092.80	2100.36	0.00982	2.530223	0.038033061	14.5

In this table we have calculated total ROA, ROE and OT with the help of factors like Net income, total asset, shareholder equity, other income of last ten years from March 2007 to March 2016.

**RESULT INTERPRETATION**

I have used the SPSS tool to know the relationship between the variable ROA, ROE, Other Income/ Total Asset and Interest rate. We find out the relationship between these variable through regression as it shows the significant relationship as whole and it can be interpret through the table

**Private Banks**

**Table-11: Interest and Return on Asset**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		9.021		.000		
Interest Rate	-.825	-4.128	17.041	.003	.681	.825

This above table shows that regression output of interest rate and return on asset of private sector banks. The value of beta for interest rate is -.825 which means change in 1 unit in dependent variable will automatically leads to change about -.825 units change in independent variable. The F- statistic value is 17.041 which show that model is significant. The p-value of interest rate is .003 which is less than .05, It show interest rate has a significant effect on return on asset of private banks. The value of r square is .681, it means that in private sector banks, the interest rate have 68 percent effect on return on asset. The profitability of private sector banks is affected by the change in interest rate. The value of R is 82 percent which means that interest rate are 82 percent correlated to each other between interest rate and ROA.

**Table-12: Interest and Return on Equity**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		4.640		.002		
Interest Rate	-.746	-3.173	10.040	.013	.557	.746

This above table shows that regression output of interest rate and return on asset of private sector banks. The value of beta for interest rate is -.825 which means change in 1 unit in dependent variable will automatically leads to change about -.825 units change in independent variable. The F- statistic value is 17.041 which show that model is significant. The p-value of interest rate is .013 which is less than .05; It shows interest rate has a significant effect on return on equity of private banks. Hence null hypothesis is rejected and alternate hypothesis is accepted. The value of r square is .56, it means that in private sector banks, the interest rate have 56 percent effect on return on equity. The profitability of private sector banks is affected by the change in interest rate. The value of R is 75 percent which means that interest rate are 75 percent correlated to each other between interest rate and ROE.

**Table-13: Interest and Other Income/Total Asset**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		1.150		.000		
Interest Rate	.702	2.789	7.776	.024	.493	.702

The above table shows the regression output of interest rate and other income/total asset of private sector banks. The value of beta for interest rate is .702 which means 1 unit change in dependent variable will leads to change about .702 units change in independent variable. The F- statistic value is 7.776 which show that model is significant. The p-value of interest rate is .024 which is less than .05, It shows interest rate has a significant effect on Other income/Total asset of private banks. The value of r square is .493, it means that in private sector banks, the interest rate have 49 percent effect on other income/Total asset. The profitability of private sector banks is affected by the change in interest rate. The value of R is 70 percent which means that interest rate are 70 percent correlated to each other.

**Public Banks**

**Table-14: Interest and Return on Asset**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		-.684		.51		
Interest Rate	.561	1.915	3.666	.09	.314	.561

The above table shows the regression output of interest rate and return on asset of public sector banks. The value of beta for interest rate is .561 which means 1 unit change in dependent variable will leads to change about .561 units change in independent variable. The F- statistic value is 3.666 which show that model is not much significant. The p-value of interest rate is .09 more than .05, It shows interest rate has not significant effect on return on asset of public banks. The value of r square is .314, it means that in public sector banks, the interest rate have 31 percent effect on return on asset. The profitability of public sector banks is affected by the change in interest rate. The value of R is 56 percent which means that interest rate are 56 percent correlated to each other but p value gives that there is no significant relationship between interest rate and ROA.

**Table-15: Interest and Return on Equity**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		3.437		.009		
Interest Rate	-.653	-2.441	5.956	.041	.427	.653

The above table shows the regression output of interest rate and return on equity of public sector banks. The value of beta for interest rate is -.653 which means 1 unit change in dependent variable will lead to change about -.653 units change in independent variable. The F- statistic value is 5.956 which show that model is significant. The p-value of interest rate is .041 which is less than .05 It shows interest rate has a significant effect on return on equity of public banks. The value of r square is .427, it means that in public sector banks, the interest rate have 43 percent effect on return on equity. The profitability of public sector banks is affected by the change in interest rate. The value of R is 65 percent which means that interest rate are about 65 percent correlated to each other.

**Table-16: Interest and Other Income/Total Asset**

	Beta	T- Value	F- Statistics	P- Value	R Square	R
Constant		-.728		.00		
Interest Rate	.839	4.355	18.964	.002	.703	.839

The above table shows the regression output of interest rate and other income/total asset of public sector banks. The value of beta for interest rate is .839 which means 1 unit change in dependent variable will leads to change

about .839 units change in independent variable. The F- statistic value is 18.964 which show that model is significant. The p-value of interest rate is .002 which is less than .05, It shows interest rate has a significant effect on Other income/Total asset of public banks. The value of r square is .703, it means that in public sector banks, the interest rate have 70 percent effect on other income/Total asset. The profitability of public sector banks is affected by the change in interest rate. The value of R is 84 percent which means that interest rate are 84 percent correlated to each other.

### **CONCLUSION**

The main objective of this dissertation is to analyze the interest rate effect on the Banks profitability. For this, sample was divided into two groups- Public sector banks and Private sector banks. The regression output for private sector shows that interest rate has significant effect on the profitability ROA in private sector. The value of r square shows 68, which means the interest rate effects the profitability (ROA) about 68 percent. In case of the return of equity (ROE) in private sector bank, there is significant effect of interest rate on banks profitability which is about 55 percent. There is significant effect of interest rate on the Other income/total asset, the value of r square is 49 percent means 49 percent interest rate effect on banks profitability. In case of public bank, interest rate is effect on banks profitability (ROA) around 31 percent which shows less effect as compare to private banks and ROE around 42 percent. In case of other income /total asset, the value of r square is 70, which means that 70 percent interest rate is effects on banks profitability. Hence from the interpretation, I conclude that in both private and public banks, the interest rate affect the private sector most as compare to public banks.

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**FRAUDS AND MANIPULATION PRACTICES IN NBFC'S**

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**ABSTRACT**

*Non-banking finance companies (NBFCs) form an important part of the Indian financial system. They play a significant role in nation building and financial inclusion by harmonizing with the banking sector by providing credit to the unbanked segments of society, especially to the micro, small and medium enterprises (MSMEs), which frame the support of business and development. NBFCs' ability to understand their customer profile, their credit portfolio and deliver customised products and services are driving their fast growth in India and gives them an edge, as does their ability to innovate and customise products as per their clients' needs. The NBFC sector in India shows significant transformation which is to be recognised as one of the systemically important components of the financial system. NBFC helps in channelizing the scarce financial resources to capital formation. The growth of NBFCs is not just driven by traditional products like commercial vehicle financing, but also financial products like personal and housing loans, etc. Non-bank financial institutions can protect economies from financial shocks and enable speedy recovery when these shocks happen. NBFIs provide "multiple alternatives to transform an economy's savings into capital investment, which serve as backup facilities should the primary form of intermediation fail.*

*In the last few years of liberalised business environment, India face an increasing volume of frauds, especially in the financial sectors. A significant amount of growth has been witnessed in the Indian financial services sector in the last decade. NBFC sector is contributing in these fraud risks as Incorrect KYC details, Misappropriation, siphoning of funds by brokers or intermediaries, Front running and insider trading etc. Thus this paper will help to analyse the case study of the biggest scam in India that is " SHARDHA CHIT FUND SCAM APRIL 2013 ". This recent scam is considered to create a world record by slapping nearly 60 cases against Mr. Sudipta Sen, chairman of Saradha Group. Over 10 million people have been duped by the investment schemes of Saradha Group which was a consortium of over 200 private companies. The service this group offered was called as PONZI SCHEME which is very much like a chit fund. Saradha group not only denied the litigations made by SBI, but also tried to sustain their bonds in the eye of the public by undertaking 1500 journalists and 8 newspapers of different languages in 2013.*

*Keywords: Non Banking Financial Institutions, Saradha Group, Chit Fund, Ponzi Scheme.*

**INTRODUCTION**

Non-Banking Financial Companies (NBFC) are registered under Companies Act, 1956 that provides financial and banking facilities but do not come under the bank's legal definition. All the NBFC's are regulated by the Reserve Bank of India (RBI) and in section 45-IA of the RBI Act 1934, all the NBFC's are required to be registered with RBI. Businesses in which NBFC's engaged in are:-

- ✓ Loans, advances and credit facilities.
- ✓ Shares, stock and bonds Acquisitions.
- ✓ Hire Purchase Businesses.
- ✓ Insurance Businesses.
- ✓ Chit Fund Businesses.

**50-50 TEST BY RBI**

Companies whose financial assets are more than 50% of the total assets and also the income from these assets are more than 50% of the gross income, will be registered as NBFC by RBI. If the companies are engaged in agricultural operations, industrial activities, purchase and sale of goods and services or purchase, sale, construction of any immovable property as their main business and carry some financial business in a small way, then they will not be regulated by the Reserve Bank of India.

**DIFFERENCE BETWEEN BANKS AND NBFC's**

- ❖ NBFC's doesn't accept demand deposits
- ❖ NBFC's do not form part of payment and settlement system
- ❖ It does not maintain CRR, SLR etc.

- ❖ It can't borrow money from RBI
- ❖ Deposit insurance facility is not available to NBFC's

**AIM OF THE STUDY**

The aim of the study is to analyse the reasons behind the crisis in chit funds in India which special reference to the Saradha Group and Chain Roop Bhansali Scam.

**ELIGIBILITY REQUIREMENTS OF NBFC's**

As NBFC's are the institutions which diverts the savings of the community and helps in investing them for financing different activities. As per section 45-IA of the RBI Act 1934, the eligibility criteria has been mentioned for NBFC's for carrying on the business.

- Certificate of Registration from the RBI is mandatory
- Net owned funds of Rs 25 lakhs ( Rs 2 crores since April 1999)

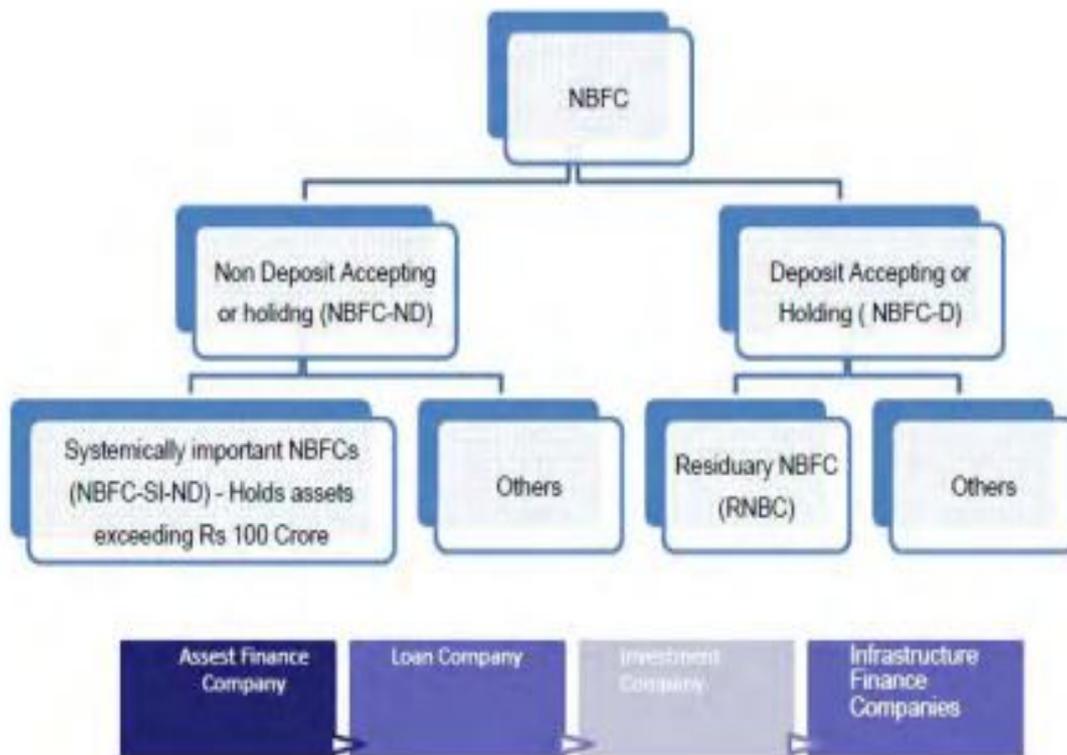
**EXEMPTION FROM REGISTRATION**

There are certain categories of NBFC's which are not regulated by RBI, and are exempted from the registration with RBI, those are:-

- **Registered With Sebi**
  - Venture capital fund
  - Merchant Banking companies
  - Stock broking companies
- **Registered With Irda**
  - Insurance company holding
- **Registered With Companies Act ,1956**
  - Nidhi companies
- **Registered With National Housing Bank**
  - Chit companies
  - Housing Finance Companies

**REGULATIONS FOLLOWED BY NBFC's**

- ❖ NBFC's must be registered with RBI to commence their business as Non-Banking financial institutions
- ❖ Should have a minimum net owned fund of Rs 25 lakhs (Rs 2 crores from April 21, 1999).
- ❖ Should have to maintain 10-15 percent of their deposits in liquid assets
- ❖ All NBFC's are not entitled to accept public deposits, rather those having the Certificate of Registration and have authorization to accept the public deposit can hold public deposits.
- ❖ NBFC's need to create Reserve Funds and must transfer 20 percent of their deposits to it every year
- ❖ NBFC's can accept the public deposits for a minimum period of 12 months and maximum period of 60 months.
- ❖ The Interest rate offered by the NBFC's are not above the ceiling rate given by the RBI. The present ceiling rate is 11 percent per annum.
- ❖ Depositors are not offered any gifts/ incentives or any additional benefits.
- ❖ NBFC's need to obtain a minimum credit rating from the credit rating agencies.



**RATING AGENCIES ARE**

- CRISIL
- ICRA Ltd.
- CARE Ltd.
- FITCH RATING

**SYSTEMATICALLY IMPORTANT NBFC’S**

As per the last audited balance sheet of an NBFC’s whose assets size is of Rs 500 crore or more , are considered as systematically important NBFC’s.

**TYPES OF NBFC’S**

❖ **Asset Finance Company (Afc):** Main activity of AFC is financing of physical assets.

**Areas Such As:-**Automobiles, Tractors, Materail Handling Equipments etc.

❖ **Investment Company (IC):** Deal in acquisition of shares and securities of other companies.

❖ **Loan Company (Lc):** Provides Finance through loans and advances.

❖ **Infrastructure Finance Companies (Ifc):** These companies deploys a minimum of 3/4<sup>th</sup> of their total assets in infrastructure loans. The net owned funds of this company are more than 300 crores and they have a minimum credit rating “A”, and also the CRAR (Capital to Risk-Weighted Assets Ratio) is 15%.

❖ **Core Investment Company (Cic):** These are NBFCs which carry on the business of acquisition of shares and securities in group companies and satisfies four conditions stated in the regulatory framework for core investment companies issued by RBI.

**NBFC’S – THE CHANGING LANDSCAPE**

In India, the financial services sector operates both ways as an formal and informal thathelps in capital formation by facilitating the flow of surplus funds in the economy to deficit spenders. The financial services sector consists of scheduled commercial banks (SCBs), insurance companies, non-banking financial companies (NBFCs), mutual funds, specialised foreign institutional investors (specialised FII), urban co-operative banks (UCBs), regional rural banks (RRBs), national pension scheme (NPSO) fund and other smaller financial entities.

Non-banking finance companies (NBFCs) form an important part of the Indian financial system. They play an important role in nation building, capital formation and financial inclusion by complementing and supporting the banking sector by providing credit to the unbanked segments of society, especially to the micro, small and medium enterprises (MSMEs), which form the base for innovation. Customization of NBFC's help them grow, because they understand their customers' profile and their credit needs, their credit portfolio which gives them an edge over banks and restructuring unbanked segments of the society. This makes them the perfect channel for delivering credit to MSME's.

However, NBFCs is in disadvantage as they operate under certain regulatory constraints. There has been a regulatory convergence between banks and NBFCs on the asset side, and also on the liability side, NBFCs still do not enjoy leverage over banks. This needs to be addressed to help NBFCs realise their full potential and thereby perform their duties with greater efficiency. Moreover, as banking system has constraint in terms of expanding their lending activities, the role of NBFC's becomes even more important now, because they have targeted the unbanked population of the economy by delivering customised services to the MSME's, especially when the government has a strong focus on promoting entrepreneurship so that India can emerge as a country of job creators instead of being one of job seekers.

So far, non-banking finance companies (NBFCs) have grown much so far as their contribution to the economy has shown upward trends from 8.4% in 2006 to above 14% in March 2015.<sup>1</sup> In terms of financial assets, NBFC's have recorded a healthy growth rate which is also known as compound annual growth rate (CAGR) of 19% over the past few years, comprising 13% of the total credit and expected to reach nearly 18% by 2018–19.

**Factors contributing to the growth of NBFCs:**

- Stress on public sector units (PSUs)
- Latent credit demand
- Digital disruption, especially for micro, small and medium enterprises (MSMEs) and small and medium enterprises (SMEs)
- Increased consumption
- Distribution reach and sectors where traditional banks do not lend

As there is a stress in the public sector banks because of increasing bad debts, their contribution especially in rural areas has declined, thereby providing NBFCs with the opportunity to increase their presence.

The success of NBFCs can be seen as they have better product lines, lower cost, wider and effective reach, strong risk management capabilities to check and control bad debts, and better understanding of their customer segments. Not only has this but their customization helped them grow as they deliver customised products according to their credit portfolio. They have shown success in their traditional businesses (passenger and commercial vehicle finance) but they have also managed to build huge amount of assets under management (AUM) in the personal loan and housing finance sector for retail banks.

The latent demand for credit demand has been served well by NBFC's to fill the gap, especially where traditional banks find difficult to serve. Improved macroeconomic conditions, higher credit penetration, increased consumption and disruptive digital trends allowed NBFC's credit to grow at a healthy rate of 7–10% over the next five years, which led the longer path ahead for NBFC's to grow.

Figure 1: Credit Growth at NBFCs as a % of total credit



**FRAUD RISKS: - NON BANKING FINANCIAL INSTITUTIONS****Multiple funding/diversion/siphoning of funds**

Siphoning of funds means when the borrowed funds are misused for the unrelated purposes of the operations against of what purpose the amount has taken .Diversion of funds, on the other hand, can include any one of the following occurrences:

- ❖ Use of short-term working capital funds for long-term commitments not in conformity with the terms of sanction.
- ❖ Using borrowed funds for creation of assets other than those for which the loan was sanctioned.
- ❖ Transferring funds to group companies.
- ❖ Investment in other companies by acquiring shares without the approval of lenders.
- ❖ Shortage in the usage of funds as compared to the amounts disbursed/ drawn, with the difference not being accounted for.

**FRAUD RISKS: NBFCs****❖ Incorrect KYC details**

KYC details are collected and assessed by the institution at the time of customer on-boarding as well as during re-KYC. A fraudster can find an opportunity to use incorrect KYC details during the customer lifecycle to commit fraud.

**Some examples**

- Tampering of KYC details
- Fraudulent KYC details such as a fake PAN being provided by the investor, change in name and other personal details not being updated, leading to opportunities for fraudsters to remit money to incorrect bank accounts and dummy customers
- Units of different account holders with the same or similar name getting consolidated despite varying bank details and addresses in different folios
- Mismatch between folios (schemes) consolidated vis-à-vis those requested for consolidation as per the customer application.

**❖ Incorrect date and time stamp**

A time stamp is a digital signature that establishes the integrity of a reference submitted by a subscriber on a specific date and at a certain time. In order to carry out a malafide action, the original time stamp gets stripped and replaced with a fresh time stamp when the SIP transmits it to a subscriber.

**Example**

The staff or broker providing preferential treatment to an investor by stamping the receipt of an application or redemption form with an incorrect time or date.

**❖ Misappropriation, siphoning of funds by brokers or intermediaries****Some examples**

- The broker cheating the investor or account holder by taking a blank cheque and later misusing the same.
- Dormant accounts such as mutual fund investments with long-term maturity or redemption not being monitored by investors regularly, making them susceptible to fraud.
- Employees taking undue advantage of the lack of segregation of duties and manipulating the settlement or clearing account reconciliations.

**❖ Incorrect commission or incentives**

Lax internal controls may give way to malpractices such as creation of agent or broker codes in the system and collusion in order to avail of extraneous commission and incentives.

**Some examples**

- Employees creating fictitious agent or broker identities with a motive of personal profiteering and misappropriating the commission or incentives passed on to the other agents or brokers
- Employees conspiring with an agent or broker for pay-out of commission or incentives at rates higher than the predetermined ones.

- Walk-in customers being shown as referrals through agents or brokers, resulting in wrongful commission pay-out.
- Commission being paid on self-investment and withheld cases.

#### ❖ **Front running and insider trading**

In order to pass on the benefit of windfall gains of the stock market to investors, the broker may resort to unethical practices such as front running and insider trading.

#### **Some examples**

- Broking house being paid “under the table” in order to portray the company’s stock as the favourite, causing the investor to buy the stock
- A broker buying shares based on insider information from companies, without any structured information that recommends the purchase.
- Analysts and brokers buying shares in a company just before the broking house recommends the stock as a strong buy.

#### ❖ **Missing dividend payments or discrepancies**

The investor may be lured by a broker or other intermediaries to put money in stocks with supposedly attractive returns. These intermediaries may collude with sham companies and cause a discrepancy in dividend payments to investors.

#### **Some examples**

- Diversion of dividend payments to dummy customers.
- Incorrect intimation of record date, dividend percentage and ex-dividend NAV by the AMC—excess or short pay-outs to investors.
- Dividend pay-out files not being verified with dividend registry excess or short pay-outs to investors.

The NBFC sector has evolved considerably in terms of its size, operations, technological sophistication, as well as entry into newer areas of financial services and products. NBFCs are now deeply interconnected with entities in the financial sector, on both sides of their balance sheets. Being financial entities, they are as exposed to these risks as banks.

Acknowledging the risk factors applicable to NBFCs, the RBI has issued a master circular on reporting of frauds. The circular lays down a road map similar to the one for banks. Akin to the banking sector, the circular has fixed the responsibility of preventing frauds on NBFCs, subjecting them to uncertain financial risks.

The RBI has further mandated the reporting of frauds by NBFCs in a prescribed format. This is expected to pose certain challenges to NBFCs and may require many to re-visit their business model. These regulations call for NBFCs to invest in upgrading their systems and processes and equip them with advanced tools to prevent as well as detect frauds in parlance with the emerging threats by way of technology.

#### **NBFC’s SCAMS**

##### **Crb Scam- Chain Roop Bhansali Scam 1995**

The case 'The CRB Scam' is intended to give a detailed insight into the frauds committed by the CRB group of companies. The case examines how the CRB group was able to defraud the investors and the regulatory authorities with ease. The role of RBI and SBI is also explored.

##### **The Doomed Depositors**

May 20, 1997 - hundreds of angry, frustrated and scared people stood outside the Reserve Bank of India's (RBI) Mumbai headquarters under the scorching sun. They were waiting for Chain Roop Bhansali (Bhansali), the head of the CRB Group of companies to arrive.

Four days earlier the RBI had given Bhansali 70 hours to come up with a plan to repay his liabilities following over 400 complaints from depositors in his company's financial schemes.

Most top officials of CRB were untraceable from the second week of May itself. The Central Bureau of Investigation (CBI) locked and sealed the offices of the CRB Group and six persons are arrested, which included four directors (two from Bikaner and two from Mumbai) of the satellite companies of the group, a financial controller in Mumbai and a relative and close associate of Bhansali in Delhi. A simultaneous searches has been conducted by CBI at 16 places in Mumbai, three in New Delhi, one each in Chennai and Ahmedabad and two places each in Calcutta, Jhunjunu, Sujangarh and Bikaner.

The bank accounts of the group companies got frozed and seized by CBI Following rumors that Bhansali had fled India and was hiding in Hong Kong or Canada, the CBI took Interpol's assistance to trace his whereabouts. RBI thought about the interest of the public and filed a winding-up petition for the discontinuance of the CRB Group.

The CRB was prohibited from selling, transferring, mortgaging or dealing in any manner with its assets and from accepting public deposits. In his defence, Bhansali sent a letter to the RBI. Though it was not signed by him, the letter said that the RBI order had led to the deterioration of the company's financial position. He has also mentioned that the company was facing tremendous problems with payments to fixed depositors and also have expressed his concern to be considered sympathetically. As a consequence, this letter led the investors to believe that Bhansali would come out of hiding and work out a way to get out of the mess.

However, Bhansali did not show up.

With the expiry of the RBI deadline, the CRB Group collapsed, shattering the dreams of thousands of investors across the country.

### **THE MAN AND THE MESS**

Bhansali was born in a jute trader's house in Calcutta and was a studious person. Bhansali completed his Chartered Accountancy in 1980, as he was from commerce background. In the same year, he started a financial consultancy firm, CRB Consultancy.

CRB Consultancy provide the issue management services to a few well-known companies in Calcutta as he has personal contacts. Over the years, Bhansali acquired other degrees as well including ACS, Ph.D., MIA (US) and a diploma in Journalism.

Though he made a lot of money, Bhansali didn't find recognition in Calcutta, therefore he moved to New Delhi to join one of the country's leading registrars of companies. He had to leave because he was caught short-charging the registrar's clients.

Bhansali then established 'CRB Consultants,' a private limited company in New Delhi in 1985. In 1992, the name of the company was changed to CRB Capital Markets (CRB Caps) and it was converted into a public limited company. The company offered various services including merchant banking, leasing and hire purchase, bill discounting and corporate funds management, fixed deposit and resources mobilization, mutual funds and asset management, international finance and forex operations. CRB Caps was also offered services such as stock-broking as it is registered on both the BSE and the NSE. The company raised over Rs 176 crore from the public by January 1995. And also it was given A+ rating by CARE and in addition cash incentives of 7-10% attracted investors in bulk to Bhansali's schemes.

### **THE MODUS OPERANDI**

Bhansali has a specialization in setting up dummy investment companies. He used to sell these dummy companies to the potential buyers. He also capitalized in leasing companies when boom took place in 1985, to become cash rich.

In order to establish good contacts in the Registrar of Companies and the Controller of Capital Issues offices he registered companies with practically no equity and then stage-managed the dummy company's initial public offerings (IPO) with a few hundred investors, largely from Calcutta's close knit Marwari Jain community. As the company was listed on the stock exchange, Bhansali then sold it for a profit to businessmen who needed dummy public limited companies in a hurry. To rig share prices in order to raise more money from the markets, Bhansali used his money in two ways. Firstly, he bought his own stock through private finance companies owned by him. Secondly, he used his other public companies to buy into each other as cross-holdings.

### **DEFRAUDING THE SBI**

As Bhansali was granted only a current account facility so he opened a current account with the name of "CRB CAPS", in May 1996, in SBI's main Mumbai branch, for payment of interest, dividend and redemption cheques. The payment warrants could be presented at any of the 4,000 SBI branches for payment. Bhansali did not enjoy any overdraft facility therefore, he was expected to deposit cash upfront into the current account, along with a list of payments that had to be honored. The logistics of payment were very complex as claimed by the branches and that it was not possible for every branch to check with the head office before honoring a dividend warrant, therefore the branches gradually began treating these instruments just like a demand draft. For about nine months, the setup worked very well.

However, in March 1997, SBI realized that the account had been overdrawn to the extent of a 59 crores. SBI called Bhansali to remit the difference immediately, which he promptly did.

**THE SYSTEMIC ROT**

The CRB group collapsed due to fraud made by them, despite the regulations in place. The lack of clear communication channels between the banks, RBI and the government seemed to have worked to Bhansali's advantage to a great extent.

There were frequent clashes occurred between RBI and SEBI in the media, trying to prove how the other was responsible for not acting early enough. The RBI claimed they had no assets examination powers to pass any judgment on the character of asset generation or deployment of the funds raised by the group.

The bank further claimed that the powers were granted only in March 1997, when the RBI Act of 1934 was amended to include specific provisions for this purpose. The bank also stated that it had begun to examine the liabilities and not the assets. However, media reports were quick to refute RBI's claims...

**THE AFTERMATH**

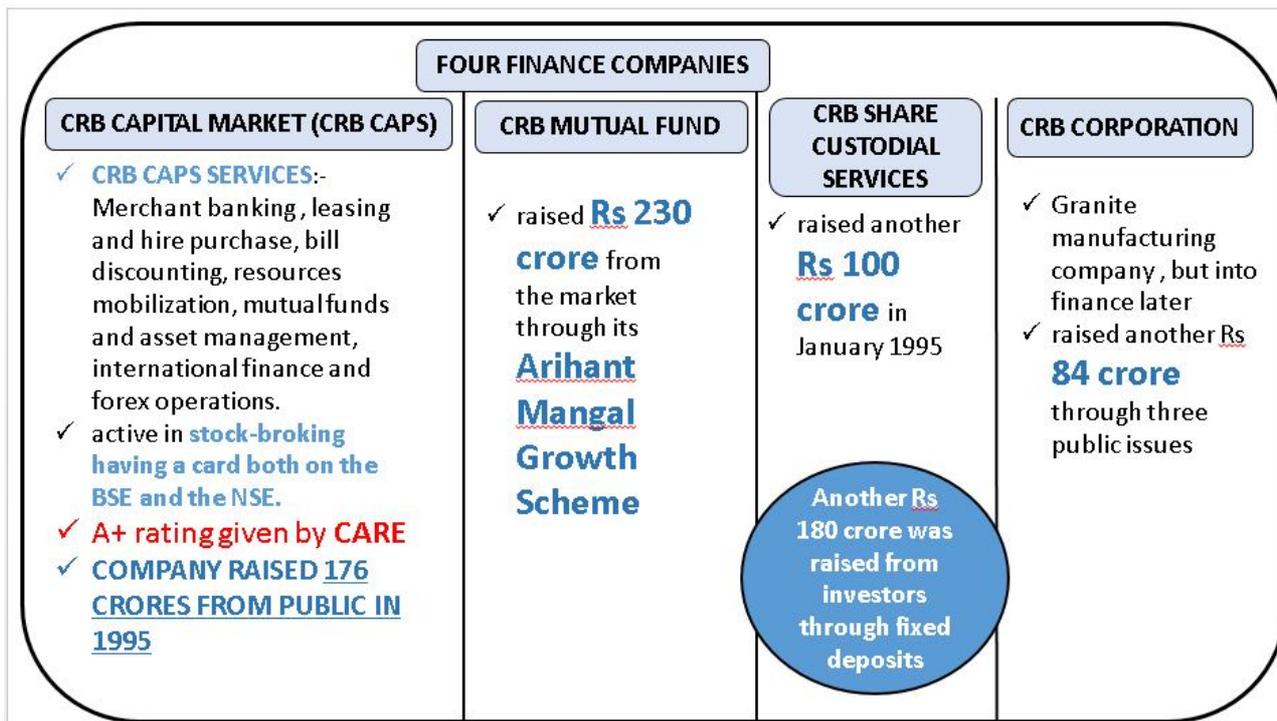
The CRB scam tremors the whole nation. Even the Union finance ministry held a meeting every day to get to the nuts and bolts of the CRB mess. In a meeting with SEBI, the finance minister criticized the regulator severely.

<b>How Much Bhansali Walked off With ... ... and the likelihood of recovery</b>
Public deposits of Rs 189 cr. No guarantee of getting anything back.
Debentures worth Rs 200 cr. No guarantee of recovery.
Investors in CRB Capital Market can kiss their Rs 252 cr goodbye.
CRB Arihant Mutual Fund picked up Rs 229 cr. Recovery remote.
Over Rs 200 cr in inter-corporate deposits. Recovery if they have assets.
CRB Capital owes over Rs 90 cr to banks; other group firms Rs 43 cr.
Co-op banks' credit exposure to CRB group: over Rs 50 cr. Part recovery.
(Source: Reserve Bank of India; Central Bureau of Investigation; Market Intelligence)

After examining the situation of CRB scam, the government asked the RBI to prepare a panel of auditors asking to explore the possibility of making auditing of NBFCs a prerequisite to registration. In October 1998, the SEBI appointed an administrator for CRB's Arihant scheme so as to explore the options to pay to the unitholders. They came up with paying them prematurely Rs 4.95 per unit, which was its NAV as of 31 March 1998. Also the assets of the scheme comprised of the fund's frozen bank accounts worth Rs 81 lakh, plus some dividends from investments, when the administrator had taken over the Arihant Scheme. Besides, there were a large number of listed (but thinly traded) and unlisted shares amounting to Rs 17.5 crore.

**These are the four companies that were involved in the scam**

- CRB CAPITAL MARKETS
- CRB MUTUAL FUND
- CRB SHARE CUSTODIAL SERVICES
- CRB CORPORATION



Bhansali raised 176 Crores from the public in 1995 from CRB CAPS, Another CRB company, CRB Corporation Ltd., (which was originally set up as a granite manufacturing company, then its activities veered into finance later), raised another Rs 84 crore through three public issues between May 1993 and December 1995. CRB Share Custodial Services raised another Rs 100 crore in January 1995. In August 1994, Bhansali launched CRB Mutual Funds (CRBMF) which raised Rs 230 crore from the market through its Arihant Mangal Growth Scheme. Another Rs 180 crore was raised from investors through fixed deposits.

Bhansali group had huge funds and their total income increased from Rs 1.2 crore in 1991 to Rs 103 crore in 1995. And also their Leasing and hire purchase business which was their main area raised from Rs 1.2 crore in 1991 to Rs 103 crore in 1995. It was analysed by Media that the group's global outlook and timely foreign collaborations were responsible for its success. CRBs joint ventures with Daewoo Securities and Keystone Group met with reasonable success. Also media reports mentioned that the CRB Group had used fraud practices to manipulate the investors, SBI and RBI, and then questions were raised when CRB CAPS net worth went up from Rs 2 crore in 1992 to Rs 430 crore in 1996. This growth was eyed with suspicion because the numbers went up incredibly high and no late than in mid-1996, reports began appearing in media and mass gathered in front of RBI in May 1997 which led to "HEAT WAVE" against CRB. Bhansali was soon arrested as he landed in Delhi.

**SHARDHA CHIT FUND SCAM: APRIL 2013**

**What Is A Chit Fund?**

"Chit funds" are also known as chit or chitty that involves transactions which are of financial nature, under which aforesaid enters into a contract with a group of people known as investors who agree to deposit a sum of money in instalments for a fixed period of time with a promise to receive an amount in return as decided by the group or by auction or tender.

**How Does It Work?**

Let's assume that the 15 people come together and decide to contribute Rs 5,000/month. This means a total of Rs 75,000 will be collected every month. This amount is then auctioned among the 15 members after a minimum discount has been set. Let this minimum discount be Rs 5,000. This means the maximum amount any person can get from the total Rs 75,000 collected is Rs 70,000. After this discount bids are invited. One person bids the highest discount of Rs 15,000, and hence he gets the money. Since he has agreed on a discount of Rs 15,000, that would mean he would get Rs 60,000 (Rs 75,000 - Rs 15,000). He will also have to bear the organiser charges of around Rs 3750 (5 % of Rs 75,000). This means he would get Rs 56,250 (Rs 60,000 - Rs 3,750) after deducting the organiser charges. The discount amount of Rs 15,000 is basically a profit that the group has made. This is distributed equally among the members, with each one of them getting Rs 1,000. This money that is distributed is referred to as a dividend. The person who got the money, will have to keep contributing Rs 5,000 every month for the remaining eleven months. If two or more person bid the maximum

discount their names will be written on chits of paper and a chit is drawn. The person, whose name is on the chit drawn, gets the money. The winner will be opted out of the future biddings. This is how chit funds works and they are perfectly legal if they are registered under the Chit Funds Act 1982, a central statute or various state-specific acts.

### **ABOUT THE SCAM**

Saradha Group of financial services was incorporated in the year 2006. It was a consortium of over 200 private companies with Sudipto Sen as a Chairman. It runs collective investment schemes popularly referred to as chit funds. The service offered by this group was called as **PONZI SCHEME** which is very much like a chit fund. However, the PONZI Scheme benefit the investors to avail high rate of return. The workings of the PONZI SCHEME is investment of capital which leads to return on the investment and further additional investment by new investors increases the rate of return as to increase the funds raised. The initial appraisal of capital required by the SG was by issuing Secured Debentures to investors and so this was their first method of raising funds as you read on you will be astonished as to find the different ways a company can raise funds though it is not legal, this is what the scandal is about.

The company grew in strength and the numbers increased to 50 and any such group or company falls under the jurisdiction of SEBI (Securities Exchange Board of India) and the rules and regulations would apply to this SG Company i.e. to prepare a prospectus defining the objective, shares, assets, to submit reports, profit and loss as well as balance sheet statements and so on, which the SG was not ready to do and so this group ignored SEBI litigations and widened its location to all corners of Indian territory and the number of SG was about 300 SME's (Small & Medium Scale Ent.) In the year 2010, they were categorized as Tourism Agency, Real Estate Agency, Motorcycle Manufacturing Company, Water Supply Agency, Recruitment Agency and so on. SEBI warned Saradha group in 2009 and persisted its investigation through 2010 after which Saradha group started running various collective investment schemes, the very nature of the investment were kept away from the investors and instead were fraudulently sold as chit funds. SEBI, no longer needing to remain a spectator, intervened and through the State Government of West Bengal initiated a warning to close down or do the needful.

#### **Should Mamata Banerjee own up moral responsibility for the scam?**

The West Bengal chief minister and her party leaders refused to own up responsibility for the Saradha scam, stating that the group came into being in 2006 when the Left Front was in power in the state.

That fact none can deny. But...

According to a report published by the Special Investigation Team set up by the West Bengal government, Saradha's annual collections went up from Rs 15 million at inception to Rs 10.08 billion in 2011-12 and Rs 8.5 billion in 2012-13, when Banerjee was chief minister.

In 2011-12, the Saradha group spent millions of rupees sponsoring cycles, motorcycles, ambulances etc that Banerjee distributed among the people in Jangalmahal and other backward areas of Bengal.

It was at this time that the state government also issued circulars to only keep newspapers owned by the chit fund group in all government libraries.

For the second time SG ignored the given warning and transformed their group into a small agency dealing in buying and selling of SME's shares to other likely SME's or public. Apart from adapting to this method of raising funds, the SG wanted to be liberated from all bindings of the government and SEBI and after only 3 months in this undertaking, realized that SEBI has a clear authorization in shares being traded.

The acquired capitals were highly invested in Bengali Film Industry and members of the parliament and a member of the legislative assembly was appointed as the brand ambassador of SG. Further SG in order to socialize their network and to increase their goodwill, they opted for the best option there is „a deed of kindness“, the group undertook campaigning and other financial necessities for the Kolkata Football Association and contributed motorcycles to Kolkata Police Force so as to sustain their bonds in the eye of the public.

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An estimate 1500 journalists and 8 newspapers of different languages were undertaken by the group in the year 2013, in other words SG managed to entice the media, the most unstable catalyst in the economy. However, justice cannot stay still or play blind for too long. All workings against the law must be revealed and the committers penalized. TMC forcefully purchased the journalists and newspapers for price much lower than the market value through blackmail which brought disclosure to all the unlawful conversions made by the group and this information was leaked where in SEBI litigated the SG to liquidate all their assets and dissolve their undertakings to remit the due to the investors. This is to prove that SEBI holds all grounds and there is a moral we all tend to forget these days in the name of greed and success “truth exposes itself sooner or later”.

**WHAT SHOULD INVESTORS DO TO PREVENT CHIT FUND SCAM?**

- **Credibility and Creditworthiness** of the company and promoters need to be checked.
- **Reporting** of the fraudulent practices exist in the company.
- NBFCs shall put in place a reporting system for recording frauds without any delay
- NBFCs should specifically nominate an official of the rank of General Manager or equivalent who will be responsible for submitting all the returns to the Bank
- NBFCs shall disclose the amount related to fraud, reported in the company for the year in their balance sheets.
- Reporting of Frauds to Reserve Bank of India.
  - ✓ Frauds involving ₹ 1 lakh and above
  - ✓ Frauds committed by unscrupulous borrower
  - ✓ Frauds involving ₹ 1 crore and above

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**COMPETITIVE INTENSITY, MARKET TURBULENCE, TECHNOLOGICAL TURBULENCE,  
INNOVATION TYPES AND FIRM BUSINESS PERFORMANCE IN MSMEs**

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**ABSTRACT**

*The objective of this research is to examine effect of market turbulence, technological turbulence and competitive intensity on business innovation types and their effect on firm business performance for MSMEs. The integrated model developed in this research as extension of environment-strategy-performance framework for innovation strategy may provide a very useful framework for MSMEs to decide on type of innovations to pursue to increase chance of business success.*

*Motivation of this research is to help in providing guidance to MSME managers in formulating innovation strategy for business success.*

*High technology industry is characterized by high level of innovative activity and its environment is characterized by higher market turbulence, technological turbulence and competitive intensity. Drawing inspiration from high technology environment and examining innovation theories, theory of resource based view, dynamic capability theory and environment-strategy-performance framework, this research proposed a research model which extends environment-strategy-performance framework for innovation strategy considering market turbulence, technological turbulence and competitive intensity environment variables. This is the major theoretical contribution of this research.*

*The investigation of environment factors – competitive intensity, market turbulence and technological turbulence, the wide range of business innovations and consequence on firm business performance in an integrated model is a significant contribution of this study to the literature on innovation and strategic management and serves to bridge the gap in the literature between environment, innovation strategy and firm business success.*

*Based on this research model, empirical study was carried out in 6 countries (USA, UK, India, Russia, Brazil, Vietnam, Kenya) belonging to 3 different categories of countries (advanced/developed countries, emerging countries and low income developing countries) covering 659 MSME employees, managers and owners. Data was analyzed using PLS method.*

*This study revealed that while competitive intensity does not have statistically significant effect on all 4 categories of innovations – offering anchored innovations, customer anchored innovations, process anchored innovation and presence anchored innovations, market turbulence and technological turbulence have. All these are new and significant findings of this research in context of MSMEs and provide insights and guidance to managers in formulating innovation strategy for their firms.*

*This research uses 12 dimensions business innovation model for study. Research finding that offering anchored innovation does not have any significant effect on firm business performance add weightage to argument that firms need to go beyond only offering based innovations to achieve better firm performance.*

*The research finds that customer anchored innovation, process anchored innovation and presence anchored innovation have positive and statistically significant relationship with firm business performance. Out of all 3 innovations categories, presence anchored innovations is contributing more to variance of firm business performance. This finding helps to understand why past research focusing on only one or few types of innovations have given mixed result.*

*Keywords: Technological Turbulence, Competitive Intensity, MSMEs*

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**1.0 INTRODUCTION**

Across the industries, Firms are using innovation as a strategy for building competitive advantage (Sawhney, Wolcott & Arroniz, 2006). But not all of them are successful.

Rate of innovation differ across the industries e.g. in high technology industries, innovation rate is very high while that is not the case in many other industries. It is also true that all innovations do not succeed e.g. in high technology industries, innovative products have been reported to have more than 50% higher failure rate than normal products (Mohr, Sengupta & Slater, 2009).

Innovation is quite talked about and discussed in firms as it enables creating new markets and also helps in entering in the existing markets (Schumpeter, 1942; Kim & Mauborgne, 2005). Still innovation research need to answer this questions more clearly – under what conditions, what innovation can be used to create business value impacting firm performance in positive way. This question makes more sense because of high failure rate of innovations. If it is known that under what conditions, which type of innovation can yield better result, it can help firms to improve their chance of innovation success.

Innovation focus is also changing and becoming more and more broader and includes not only product and process innovations but other types of innovations as well e.g. solutions innovation, networking innovation, brand innovation etc. A comprehensive look on innovation with the right choice can enable organizations to have unique value within the market (Sawhney et al., 2006). MSMEs have also been taking advantage of innovation to get success in the market (Subrahmanya, Mathirajan & Krishnaswamy, 2010). MSMEs have various kinds of constraints in comparison to larger firms (Hessels & Parker, 2013). Hence, selecting the right type of innovation across different business system dimensions can help MSMEs in adjusting their innovation strategy based on their resource condition and other constraints.

While theoretically innovation has been agreed to have positive effect on firm performance, empirically it has not very conclusive (Coad, 2009; Rosenbusch, Brinckmann & Bausch, 2011; De Faria & Mendonca, 2011; Cucculelli, 2013). There may be many reasons possible for these mixed results in empirical research. One possible reason may also be that firms when they have decided their innovation strategy have not considered some of the important environment conditions. Not selecting the right innovation type may affect chances of success of innovation.

High technology industry environment is characterized by high environmental turbulence and high technology industries are also hotbed of innovation (Mohr et al., 2009). High environment turbulence in high tech industry is characterized by high technological turbulence, high market turbulence and higher competitive intensity. Understanding effect of some of the important environment turbulent conditions on business innovation types can help in understanding what innovations may make sense for better firm performance. Once this effect is understood, it can also help in policy making. To stimulate innovation, policy changes can help in creating suitable environment.

## **2.0 LITERATURE REVIEW**

For literature review, this research examines past research carried out in the area of innovation theory and strategic management theories. On strategy side, relevant theories considered are resource-based view, dynamic capability theories and environment-strategy-performance framework.

Empirical research carried out in this context for both large as well as MSME sector was examined with special emphasis on MSME sector since in this research, focus is on MSME sector.

### **Innovation Types**

Literature review traces definition of innovations starting from Schumpeter (1942) to recent definitions given by Sawhney et al. (2006) and O'Cass and Weerawardena (2009). Overall, trend in evolution of innovation definition can be found in the research literature. Trend is towards making innovation wider in scope and also defining various types of innovations very specifically. Primary focus of earlier empirical studies in innovation was on R&D intensity, patents, product and process innovation.

Sawhney et al. (2006) defines business innovation as innovation across multiple dimensions of business system including offering, platform, solutions, customers, customer experience, value capture, process, organization, supply chain, presence, networking and brand.

For the purpose of this research, hence, definition of business innovation given by Sawhney et al. (2006) has been adopted. Sawhney et al. (2006) defines business innovation as innovation across multiple dimensions of business system. This definition may have better explanatory power behind effect of innovation on firm performance since it covers multiple dimensions of business system including recent ones and also it may give much better guidance for deciding innovation strategy in terms of which innovation types, a firm should choose since it is very specific and defines 12 types of innovations along different dimensions of business system clearly.

Based on this definition, this research groups 12 dimensions of innovations in 4 categories – offering anchored innovation (offering, platform and solution), customer anchored innovation (customer, customer experience, value capture), process anchored innovation (process, organization, supply chain) and presence anchored innovation (presence, networking and brand).

Innovation construct has been defined in different ways in the empirical research literature. Constructs have been defined based on inputs to innovation, innovation process and innovation output. Any innovation research literature needs to be critically examined for that.

Innovation inputs such as R&D intensity have their limitations. R&D intensity may have lagged effect on firm performance. Innovation process may not measure innovation outputs of the firm. Innovation output of the firm may be the more suitable indicator for measuring its effect on firm performance.

### **Innovation Strategy**

Sundbo (1997) have classified all innovation theories in 3 categories and this research takes perspective of strategic innovation paradigm. In strategic innovation paradigm, firms determine innovations strategically. This research will contribute to innovation theories based on this paradigm.

As per Krishnan (2012), one major component of innovation strategy is also a decision by a firm whether firm should pursue product innovation or process innovation. Product and process are two different types of innovation and limiting choice only to these two choices may not be good enough for firms including MSMEs.

### **Environment-Strategy-Performance Framework**

From strategic management literature, environment–strategy–performance framework provides the relationship between environment, strategy and performance. As per this framework, firms adopt strategies in response to change in environment to protect their competitive advantage and to increase their firm performance (Lee, 2010).

There are various ways in which environment can be modeled. Lenz and Engledow (1986) categorized approached for modeling the environment in 5 categories and one of them is resource dependence model which talks about external control of organization and effect of external forces on strategic choice of firms (Pfeffer&Salancik, 2003).

Environment-strategy-performance has been supported by a number of studies ranging from Miller and Friesen (1983), Porter (1980) and Lee (2010). Strategic choice, strategic fit and contingency theory supports this view and falls in category of theories supporting environment-strategy-performance viewpoint.

### **Resource Based View and Dynamic Capability Theory**

Resource based view is an inside out approach where firms base their strategies based on their unique assets and competencies (Zhou, Yim&Tse, 2005). This approach is complemented by dynamic capability theory, which stipulates dynamic configuration of firm's capabilities in response to environment changes. Both the theories make sense for MSMEs. MSMEs in general are constrained by resources but same time can be more flexible and agile and can have higher dynamic capability. An innovation strategy needs to consider existing resources and assets and also capability to dynamically change them to meet the demand of changing environment.

## **3.0 THEORETICAL FRAMEWORK, RESEARCH MODEL AND HYPOTHESES**

Market turbulence, competitive intensity and technological turbulence are three different characteristics of environment and can be perceived and assessed more clearly. Market turbulence indicates change of rate in customers composition and their preference (Jaworski&Kohli, 1993). Competitive intensity measures behavior, resource and ability of competitors to differentiate (Jaworski&Kohli, 1993). Technology turbulence measures rate of change of technology in the environment.

Review of literature on innovation theories and strategic management theories indicates relation between environment and strategy and between strategy and firm performance. Based on this, this research proposes for MSMEs, effect of market turbulence, competitive intensity and technological turbulence on innovation types and effect of innovation types on firm performance.

### **Innovation in MSMEs and Its Effect on Firm Performance**

Past research recognizes difference between MSMEs and large firms, which may affect assessment of environment conditions and choice of innovation types differently in MSMEs in comparison to large firms.

Large and small firms differ in quantity and type of resources (Gronum, Verreynne&Kastelle, 2012). These firms also differ in research mix. Small firms may not take long-term research projects. Also may differ on their emphasis on basic and applied research. External environment may also affect small firms differently and hence reaction of small firms may be different. Management and ownership of MSMEs differ from large firms and hence may also lead to difference in assessment of environment conditions and choice of innovation types.

In the research literature, there seems to be some difference in opinion also on certain aspects. E.g. some research points out that R&D activity of a firm increases with the firm size but some research provides contrary evidence (Kim, 2000).

From the research perspective, there seems to be some gap and bias in innovation research for SMEs. Past research for SMEs in innovation have been more focused on technological innovation, has been geography specific, more focused on technology intensive sectors and have issues related to innovation definition used (Hoffman, Parejo, Bessant&Perren, 1998).

From the literature review of research on innovation and firm performance, major research gap found is in the measurement of innovation construct. Innovation construct has been measured through very limited innovation types such as product innovation or process innovation or through measures of innovation input such as R&D intensity or No of R&D employees or through measures of innovation culture or process of the firm. One of the major reasons of mixed results of innovation effect on firm performance may be this.

### **Market Turbulence and Innovation**

Past literature has been surveyed for research studies on effect of market turbulence on firm's innovation. In one of the study of MNC foreign firms, effect of market turbulence has been examined on product innovation (Lee, 2010). This study does not focus on MSMEs and also does not consider other business innovation types. Here effect of market turbulence on product innovation has been found to have no effect.

In another study of SMEs in turkey, Uzkurt, Kumar, Kimzan and Sert (2012) looked at effect of market/demand turbulence on firm innovativeness. Overall effect has been found significantly positive. Here, this study again, does not contribute to theory of innovation type choice based on environment condition. Firm innovativeness has been considered as a single construct here. Also, this construct considers only product, process and distribution innovation. It does not consider customer anchored innovations.

### **Competitive Intensity and Innovation**

Here in the literature survey, research gap has been found in study of effect of competitive intensity on different business innovation types. Studies either consider effect of competitive intensity on a single construct of innovation (Uzkurt et al., 2012) or only on breakthrough innovation in context of well-known consumer brands in china (Zhou et al., 2005).

### **Technological Turbulence and Innovation**

Here also, past studies have been found to be very few and have focused only on single construct of innovation (Uzkurt et al., 2012) or product innovation in context of foreign MNC firms (Lee, 2010) and breakthrough innovations in context of consumer brands in china (Zhou et al., 2005).

Integrating theories of innovation, dynamic capability, resource based view and environment-strategy-framework, this study has proposed an integrated model to study the effect of market turbulence, technology turbulence and competitive intensity on firm business innovation types and effect of firm business innovation types on firm business performance.

As mentioned earlier, this research adopts definition of business innovation given by Sawhney et al. (2006) and groups 12 dimensions of business innovations in 4 groups to keep hypotheses in manageable proportion. 4 groups of business innovation are organized around 4 anchors mentioned by Sawhney et al. (2006) – what, who, how and where. These 4 groups are offering anchored innovation (offering, platform, solution), customer anchored innovation (customer, customer experience, value capture), process anchored innovation (process, organization, supply chain) and presence anchored innovation (presence, networking and brand).

16 Hypotheses have been formed for this research based on market turbulence, competitive intensity, technological turbulence, offering anchored innovation, customer anchored innovation, process anchored innovation, presence anchored innovation and firm business performance. Arguments for the hypotheses and hypotheses themselves have been presented below.

When market has lower competitive intensity, firms may not offer many choices to customers. Firms may not have incentive to differentiate and innovate. This is also evident from general observation in markets. When foreign firms were not allowed to enter in Indian market, customers had little choices. Under higher competitive intensity, firms may not have a choice but to differentiate and hence forced to innovate. Hence, competitive intensity should have positive influence on different innovation types.

But, in the literature, there seems to be contradictory arguments for innovation strategy of the firms under higher competitive intensity. Contradictory argument stems from imitation possible by competitors under higher competitor intensity.

Any innovation can be copied easily and hence there is disincentive for innovation under these conditions.

Argument of this research is in favor of offering anchored innovations and customer anchored innovations in presence of competitive intensity for MSMEs else it may be difficult for MSMEs to survive in such intense competition market.

**Hence, hypothesis H1 and H2 is as follows**

H1. Competitive intensity positively influences offering anchored innovations

H2. Competitive intensity has positive effect on customer anchored innovations

On the similar ground, it is argued that under higher competitive intensity, some firms may resort to process and presence based innovation which may also give them cost advantage and look at innovative way of reaching out to their customers. Based on that, following hypotheses H3 and H4 are proposed -

H3. Competitive intensity has positive influence on process anchored innovations

H4. Competitive intensity has positive influence on presence anchored innovations

Zhou and Li (2010) argues that under market turbulence, a firm will have to continuously think of modifying its marketing mix and Paladino (2008) argues that under turbulent market conditions, firms can not follow routines.

**Based on this, hypotheses for impact of market turbulence on business innovation are formulated as follows**

H5. Market turbulence positive influences offering anchored innovations

H6. Market turbulence has positive effect on customer anchored innovations

H7. Market turbulence has positive influence on process anchored innovations

H8. Market turbulence has positive influence on presence anchored innovations

When technology is rapidly changing, firms have the necessity to launch more products based on new technology else their existing products may no longer be demanded in the market (Mohr et al., 2009). For MSMEs, these kinds of markets may provide them the opportunity to enter in the market. New technology may also necessitate changes in the processes in the firm.

Technology turbulence also may provide firms opportunity to alter components of the value chain (Zhou et al., 2005). Slater and Narver (1994) argue that many of the major innovations in high technology turbulence condition may come from outside of the industry. It can be expected that these outside players may introduce more innovations which may use novel ways of providing customer experience and also novel ways of reaching to customers including branding.

**Hence, following hypotheses are formulated for effect of technology turbulence on various types of innovations**

H9. Technological turbulence positively influences offering anchored innovations

H10. Technological turbulence positively influences customer anchored innovations

H11. Technological turbulence positively influences process anchored innovations

H12. Technological turbulence positively influences presence anchored innovations

Product innovation has been used in past research for examining its effect on firm performance frequently but platform and solution innovations are unexplored parts. Offerings anchored innovation includes platform and solution innovation as well. Platform innovations focus on creating common base, which can be used across multiple products and services. e.g. cloud technology is one such innovation in information technology market.

Solution innovation refers to innovation on integrated bundling of products and services for providing customized solution to customers. Increasingly firms are resorting to such innovations. These innovations may also create new markets for firms.

While product and platform innovations can be considered to be feasible for MSMEs, solution innovations may face resource constraint problem in MSMEs.

**Following is the hypothesis for effect of offerings anchored innovation on firm performance for MSMEs**

H13. Offerings anchored innovation positively influences firm business performance

Past research has focused on market based innovations. As per definition given by Sawhney et al. (2006), market based innovations may be only one subset of customer anchored innovations.

Any innovation which focuses on customer, customer experience or value capture should lead to enhanced business performance for the firm including MSMEs. Hence, research proposed following hypothesis for effect of customer anchored innovation on firm business performance -

H14. Customer anchored innovations positively influences firm business performance

Roberts and Amit (2003) examined effects of cumulative innovations on financial performance of banks. Cumulative innovations include process and distribution innovations. They reported positive effect of these innovations on bank financial performance.

Here, in this research, process anchored innovations include innovations on process, organization and supply chain dimension while presence anchored innovations include innovations on presence, networking and brand dimensions.

**Hypothesis for effect of process anchored innovation and presence anchored innovation on firm business performance is as follows**

H15. Process anchored innovation positively influences firm business performance

H16. Presence anchored innovation positively influences firm business performance

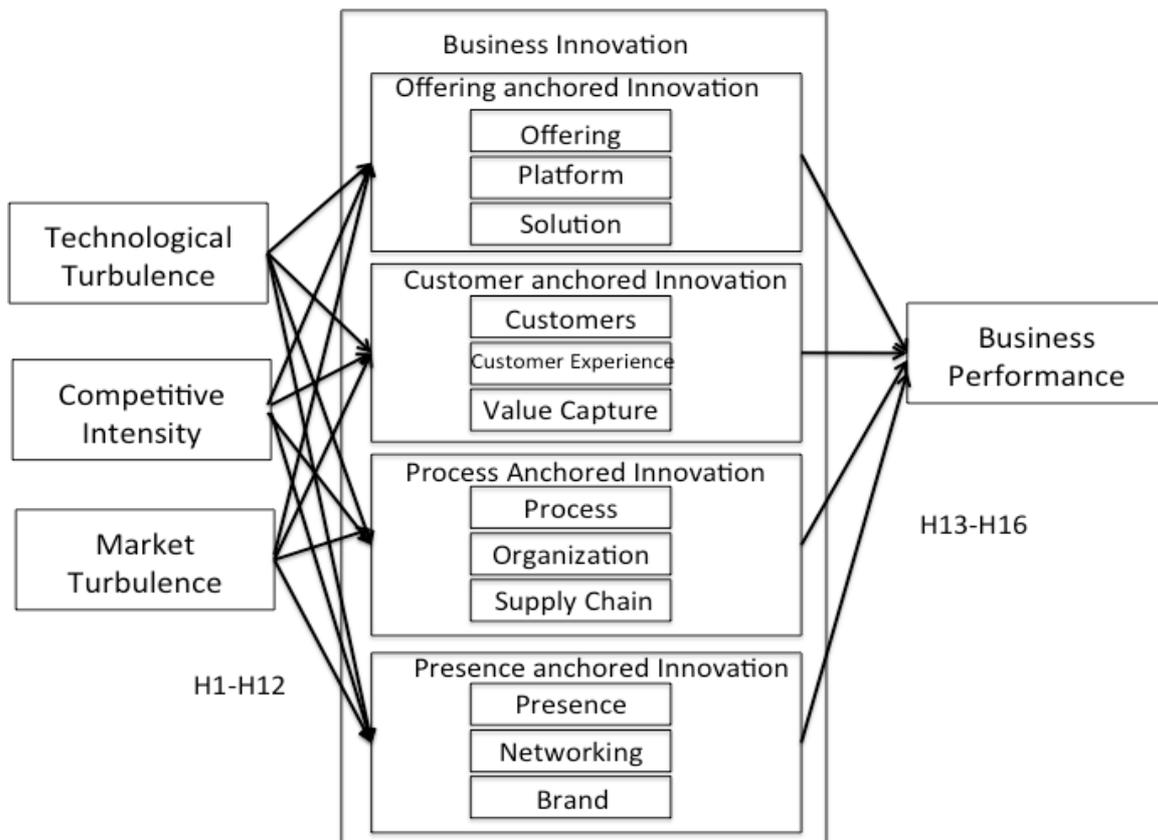


Figure-3.1: Research Model

**4.0 RESEARCH DESIGN**

Since dependent variable in this study is Business Innovation and firm performance, business innovation and firm performance at the firm level is the unit of analysis for this study. The research method chosen for this study is cross-sectional survey design.

The sample population was determined keeping in mind a proper sampling frame selection and the response rate that is needed to provide findings needed for this research.

This research focuses on MSMEs with number of employees less than 250. This was decided based on survey of MSME definitions used in research literature.

For selecting categories of countries based on development, this research has used IMF classification system.

Key informant in this research is employees, owners and founders of the MSME. Employees of MSME include junior employees as well as senior management and CEOs. This avoids the bias when key informant includes only CEOs, Owners, Founders or Senior Managers.

On line survey approach was used to collect data from respondents. All important questions were made mandatory in the survey. Only completed questionnaires were further considered for data analysis. Survey did not ask for email id or any other identity information.

To improve content validity and reliability, focus group studies and pilot studies were carried out.. Both manufacturing and service firms were included in focus group study and pilot studies.

### **5.0 RESULTS AND FINDINGS**

Out of total 1022 survey questionnaires attempted, 659 were found suitable after deleting cases of large organizations, invalid and incomplete questionnaires.

Data was collected from 6 countries – USA, UK, Vietnam, Kenya, India, Russia and Brazil. These countries have been grouped in 3 categories – Advanced/Developed Countries, Emerging Countries and Low Income Developing Countries.

All the questionnaires received from participants where employee number was more than 250 were not considered for analysis. Sample included both manufacturing and service MSMEs.

Analysis was carried out whether non-response bias and common method variance is a concern for study. Wave analysis method for all 3 groups of countries indicated that study is not affected by non-response bias. Also, Harman's one factor test demonstrated that common method variance is not a concern for study.

For estimation of the research model, PLS (Partial Least Square) method has been used in the research. Results for the PLS estimation have been obtained from SmartPLS (version 3.0) tool developed by Hair, Hult, Ringle and Sarstedt (2016).

Measurement model evaluation was carried out for reliability, convergent validity and discriminant validity. Sufficient level of indicator reliability was reported for all indicators. Cronbach's alpha and composite reliability were well above the threshold of 0.7 for all constructs in the research model and hence internal consistent reliability was established.

Convergent validity was established for measurement model based on average variance extracted, which was found higher than threshold of 0.5 for all latent variables.

Based on cross loading, Fornell-Larcker criterion and HTMT method, discriminant validity of measurement model was established.

According to hypothesis testing result, out of 16 hypotheses, 11 hypotheses were found to be supported by the study: Hypotheses 5: Market turbulence positively influences offering anchored innovation; Hypotheses 6: Market turbulence has positive effect on customer anchored innovation; Hypotheses 7: Market turbulence has positive effect on process anchored innovation; Hypotheses 8: Market turbulence has positive influence on presence anchored innovation; Hypotheses 9: Technological turbulence positively influences offering anchored innovation; Hypotheses 10: Technological turbulence positively influences customer anchored innovation; Hypotheses 11: Technological turbulence positively influences process anchored innovation; Hypotheses 12: Technological turbulence positively influences presence anchored innovation; Hypotheses 14: Customer anchored innovation positively influences firm business performance; Hypotheses 15: Process anchored innovation positively influences firm business performance; Hypotheses 16: Presence anchored innovation positively influences firm business performance.

Hypotheses 1 to 4 related to effect of competitive intensity on four categories of innovation and hypotheses 13 related to effect of offering anchored innovation on firm business performance were not found to be supported by the study.

### **6.0 CONCLUSION AND DISCUSSIONS**

This study revealed that while competitive intensity does not have statistically significant effect on all 4 categories of innovations – offering anchored innovations, customer anchored innovations, process anchored innovation and presence anchored innovations, market turbulence and technological turbulence have. All these are new and significant findings of this research in context of MSMEs and provide insights and guidance to managers in formulating innovation strategy for their firms.

This research uses 12 dimensions business innovation model for study. Research finding that offering anchored innovation does not have any significant effect on firm business performance add weightage to argument that firms need to go beyond only offering based innovations to achieve better firm performance.

The research finds that customer anchored innovation, process anchored innovation and presence anchored innovation have positive and statistically significant relationship with firm business performance. Out of all 3 innovations categories, presence anchored innovations is contributing more to variance of firm business performance. This finding helps to understand why past research focusing on only one or few types of innovations have given mixed result.

This research contributes to organizational knowledge of MSMEs in several ways. First, it enhances understanding that how environment characteristics such as competitive intensity, market turbulence and environment turbulence affect choice of innovation in MSMEs. Second, it extends the large body of research that considers influence of innovation on firm business performance by adding choice of several business innovation types.

The work extends research in innovation and strategy that considers effect of environment conditions on innovation choice of MSMEs and their effect on MSME's business performance.

In addition to contributing to research, this study also contributes to practice. It emphasizes that there is a need to take a more holistic perspective on managing innovation.

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## USES OF MOBILE PHONE AS LEARNING TOOL BY STUDENTS

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**ABSTRACT**

Escalating uses of mobile phones and their compulsory presence in class rooms has rose up several questions. This indicates a change or paradigm shift in present system. Traditional methodologies need to be replaced or to be integrated with newest learning tool, Mobile phone. Present research explores the learning habits of students of National Capital Region in India. Study emphasis on the student's uses of their Mobile phones and explore the idea to make use of it in a guided and designed approach of learning. Unguided or unplanned learning from mobile phones can be designed. Researchers have presented the different dimensions of Mobile learning habits of students and suggest how to incorporate this technology in present system as tool to connect, communicate, collaborate and create using rich digital resources.

*Keywords: Mobile phones; learning tool; Students of Higher educational institutions*

**INTRODUCTION**

**Mobile communication** has changed the classroom scenario and teaching and learning at every level Attewell, J. (2005). On the other hand Koskimaa (2003) has viewed that reading of books have decreased instead, Internet pages are most favourite for reading. Technology of Mobile phones brings in new scores in speed and connectivity to our social life. Communication links are now in unprecedented number of hands and variety of individuals. A student with his/her mobile phone is equivalent to have superpowers. Ipsos and Verizon (as cited in Tan & El-Bendary 2013) found out that adopting mobile phones with smart technologies has increased knowledge. From morning till night it works as an alarm clock. Calendar a reminder, personal diary a calculator a camera, video recorder. Google and other search engines, dictionaries, encyclopaedias for learning help. He/she has Apps to manage payments, shopping, appointments, ticket booking for all kind of travels and outings, bank accounts. Now a day's smart phones are all in one gadget with the capability to offer numerous advantages that technology can furnish as educational tool. Laskaris.J. (2015) most learners prefer using tablets and smart phones for learning in this generation and more learners now prefer multimedia to stay engaged in a learning environment.

Our new generation students have all the exploring ideas in their hands as their mobile phones. They often use their phones for learning and different knowledge assistance. Mobile learning refers to the use of mobile devices for the purpose of learning. Ally (2009). Although in traditional classrooms we consider mobile as most distractive devices and do not allow students to cling with their phones. Mobile phones have been measured as "Distraction" and "loss of classroom control" stated by teachers and administrators in British Columbian Teacher Federation in *Teacher Newsmagazine* (2008). These gadgets of resources for knowledge and information can be utilized in a healthier and systematic way. We may train students to not merely consume these vast amounts of information, but to assess information, to synthesize thoughts, to generate new ideas, and to contribute meaningfully. Many researchers have portrayed mobile as learning tool and has been used to communicate with fellow students, teachers or institution (Ally, 2009 Ali & Irvine, 2009). Keegan (2002) explained the mobile learning as a foundation stone of the future of learning. We need to explore how these technologies can be used to help people learn in new ways. And we need to discover how these tools can aid us in our mission to educate students throughout the world. Instead of banning mobile devices, some forward-thinking educators are actively embracing them. Since education is an important area of life, the use of modern technologies makes it an essential part in education, not just a simple addition, says Al Hawsawi,(2002).

The value of mobile devices is that they allow students to connect, communicate, collaborate and create using rich digital resources. This doesn't aim to replace orthodox forms of teaching and learning (face-to-face in classrooms, lecture, or PPTs, Online learning material): it is a supplementary method that can maintain and develop students' learning. Mobile learning is by now well-liked by many and for many subjects too such as languages (Levy & Kennedy 2005 or Thornton and Houser 2005, amongst many others).

There is need for a massive effort in understanding how we can usefully adapt and enhance technology for the benefit of society and how we need to adapt society to maximize the benefits of new technologies.

**RATIONAL OF THE STUDY**

Youngsters are engaged with their mobile phones all the time, no matter on phone calls, using social media, different applications and pictures etc. Despite of its harmful effects, students use mobile phones in the

classrooms through which they take and distribute notes, learn new concepts, prepare for their exams and presentations. This has become an essential tool of the student's learning process and to the education system.

The Rationale of the study indicates the extent to which the mobile phones are being used in study and forming habits. Study habit is the indicator of student individuality. Generally, learner's learning character is shaped due to study habit. Better study habits leads to better academic achievement. To know the students', their study habits should be known first as these help in providing proper guidance to the needy students. So it is very important to be taken into account for their guidance of proper use of their gadgets for studies. This study will investigate the actual academic use of mobile phones among students, their attitudes toward using them as learning tool.

### DEFINITION OF KEY WORDS

- **Mobile phones**

Mobile phone is a telephone with access to a cellular radio system so it can be used over a wide area, without a physical connection to a network. With internet connectivity through the Smartphone one can open Google, YouTube, and Wikipedia and other informative giants, that can help students in many ways.

- **Learning tool**

Learning Tools are designed to help improve student's learning and reading skills by boosting their ability to read or write correctly, accurately, and to understandable. A learning tool is help for a student what he uses to work through with his or her thinking, planning and/or decision-making on the way to creating, performing or responding. Here Mobile phones are considered as learning tool when used for educational purpose. Mobiles are well-liked by students and to make them one of the best tools to be adopted by educational institutions is the key concept of present study.

- **Students of Higher educational institutions**

A person who is studying at a university or its affiliated institutes or at the other place of higher education is included as student of higher education institutions in present research. Students have come from school education system and either in under graduate level or in post graduate level.

### REVIEW OF LITERATURE

There are several studies done on different aspects of mobile phones uses and impacts or benefits, *Amin. S., and Rashed. A. (2017)* Studied with sample of 100 with 50 Teachers and 50 Parents and the results showed that respondents frequently use cell phone to SMS texting etc. It is also observed that students mostly use cell phone for un-educational activities and according to teachers and parents due the use of cell phone respondents are losing focus on their studies. *Tunio, S. (2009)* Studied usage of cellular phones on psychosocial development of students. She found that majority of the students spend more time using cell phones which have a large effect on their psychosocial development. The cell phones caused students to experience symptoms such as Anxiety, Depression or even Lack of sleep, which affected their overall psychological functioning. Use of mobile phones was examined by *Leslei Kahari (2013)* studied the effects of cell phone use on the study habits of University of Zimbabwe 1st year Faculty of Arts students. The research was distributed among 200 students who own cell phones to collect information about the respondents, cell phone type preferences, uses of cell phones during study, predominant usage during study and information about challenges facing students in using mobile phones for study purposes. The results showed significant gender differences in several aspects of cell phone use. The results also revealed that cell phone use has negative and positive effects on the study habits of university students depending on usage patterns. On the same note, *Jeffrey H. Kuznekoff & Scott Titsworth (2013)* examined the impact of mobile phone usage, during class lecture, on student learning. Participants in three different study groups (control, low-distraction, and high-distraction) watched a video lecture, took notes on that lecture, and took two learning assessments after watching the lecture. Students who were not using their mobile phones wrote down 62% more information in their notes, than those students who were actively using their mobile phones. Teachers perspective was also significantly examined by *Kevin M. Thomas, Blanche W. O'Bannon & Natalie Bolton, (2013)* surveyed 79 teachers to determine their perceptions of using cell phones for classroom instruction. Findings indicated that the majority (69%) of teachers support the use of cell phones in the classroom and were presently using them for school-related work. Generally curriculum materials are delivered digitally by teachers or classmates to other students on their personal cell phones or groups.

Teachers identified student engagement and motivation as the primary benefits; barriers included lack of access and class disruption. *Suryanarayana N.V.S., (2015)* Stated that, presence of cell phones presents options and challenges for today's students in both the ways; positive and negative. Mobile phones can be a helpful academic tool, or a hurtful academic disruption depending upon the attitude and use pattern of the student owner.

Thus most of the studies suggested that there were distraction and disturbance due to use of mobile phones in the classes but on the other hand teachers have supported the uses in a planned or guided manner. In an organized way the interruption can be changed to the healthy reading habits or can be incorporated as class room engagements for future and present research tries to find out basic reading ideas of students to present suggestion for future inclusion approach.

### **METHODOLOGY**

Present study falls under the domain of descriptive research as it intends to study the Reading or learning habits of Students from higher educational institutes using mobile phones. Random sampling method was used for the present study. The main purpose of the study was to see that how the mobile phones are being used for the reading or learning by young generation learners and to draw attention to the importance of mobile phones as learning tool. Researcher has done a survey on different related aspects to understand the uses and to extract the idea of using mobile as learning tool.

### **OBJECTIVES OF THE STUDY**

1. To study the habits of students using their mobile phones as learning tool
2. To show up the uses of mobile phones as learning tool
3. To draw attention to the importance of mobile phone as learning tool

### **DESIGN OF INSTRUMENT**

To know the learning habits of the students a self made questionnaire was developed. Some open ended questions were also kept to know the opinion of students. Questionnaire includes questions concerning different aspects of the subject of the study. The instrument asked Yes/No options and displayed their choices in a manner of number of yes and no. The major tools of research in education can be classified broadly into the following categories:

1. Inquiry forms
2. Observation
3. Interview

### **SAMPLING DESIGN & POPULATION**

The study has been conducted in National Capital Region (NCR) in India. It is the metropolitan area in India which encompasses the entire territory of capital Delhi and urban areas of neighboring states; Haryana, Uttar Pradesh and Rajasthan.

The population comprised 200 Students from different higher educational institutes. Students representing all the three levels of socio-economic status, i.e., low, average and high and belonging to Urban Area. Of these, about 50% were male and 50% were females. The age of the students was between 19 to 23 years. The medium of instruction were Hindi and English. All had smart phones and were using it frequently as asked prior to the collection of data. No personal information had been asked for the research and only willing students were given the survey questionnaire.

### **DATA COLLECTION**

The data has been collected randomly from 200 students of higher educational institutes of NCR. The questionnaire was distributed to the students. The questionnaire was explained and filled up within the specified period. Responses in the questionnaire were recorded in yes or no. They also expressed their views in open ended questions. Students have responded very well in many ways and reflected ideas and importance of mobile phones in their daily life.

### **LIMITATION**

The Study is confined to the analysis of uses of mobile phone among students of higher educational institutes. Students selected from the NCR. However the study has the following limitations:

1. The sample for this study consists of 200 students, who come from different higher educational institutes from the NCR
2. The study includes students only from the private institutes.
3. Such survey needs to be taken periodically to gauge the exact status of target population as technology and its uses keeps changing with time.
4. Due to constraints of time, certain topics have not been touched upon at all during the study while some of them explored in a limited manner. An in depth analysis can be undertaken for each of the sub topic for.

**ANALYSIS OF THE RESULTS**

The objective of this work was to identify the preferences of mobile users of their phones as learning tool and to make suggestions for future development of mobile phones as academic instrument of learning and teaching. Data had been collected on some selected items listed below. All the items represented research objectives in a manner to obtain maximum information by participants.

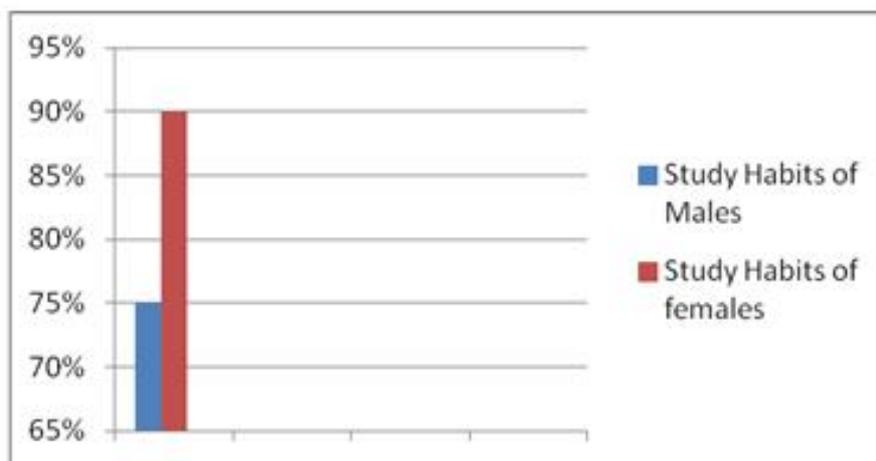
Collected data have been analyzed in form of percentage and investigator found that 75% boys and 90% girls have habits of learning from mobile phones. They frequently use their phones for learning purpose. In addition to this they find it handy and reachable all the time. Students love to check phones very frequently and rarely consider it as disturbance. Frequency of checking phone does not always signifies the learning uses of phone but other uses like; social media, texts, call logs and news or weather most of the time.

Students love to see/show photos, videos, messages or any other posts etc. in peer group and apart from these they frequently check their timetable or class groups.

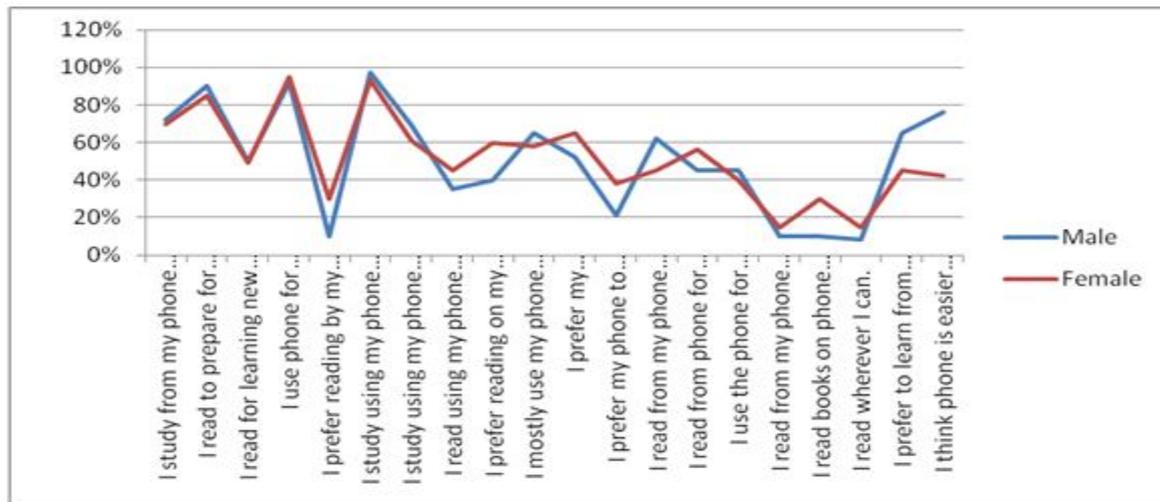
They use their phone as power tool and depend mostly on it for music, entertainment, gossiping and learning. Learning is not very popular among students but research analysis explores and gauges the learning in totality using mobile phones.

S. No.	Items	Male		Female	
		Yes	No	Yes	No
1	I study from my phone to get better grades in class tests and examinations.	72	28	70	30
2	I read to prepare for presentations and assignments from my phone.	90	10	85	15
3	I read for learning new things and news.	50	50	49	51
4	I use phone for completing my projects and presentations.	92	08	95	05
5	I prefer reading by my phone when I have nothing else to do.	10	90	30	70
6	I study using my phone almost daily.	97	3	93	7
7	I study using my phone every other day.	69	31	61	39
8	I read using my phone during weekends.	35	65	45	55
9	I prefer reading on my phone during holidays.	40	60	60	40
10	I mostly use my phone to find out about what I want to know.	65	35	58	42
11	I prefer my phone/kindle to read books.	52	48	65	35
12	I prefer my phone to read story books.	21	79	38	62
13	I read from my phone newspapers/magazines.	62	38	45	55
14	I read from phone for improving my language skills.	45	55	56	44
15	I use the phone for study related references.	45	55	40	60
16	I read from my phone during the free time in college/university.	10	90	15	85
17	I read books on phone while travelling.	10	90	30	70
18	I read wherever I can.	08	92	15	85
19	I prefer to learn from my phone than books.	65	35	45	55
20	I think phone is easier tool to learn.	76	24	42	56

Table: Showing contents covering objectives of research



Graphical presentation of reading habits of participants through phones



Proportion Male and Female student's agreed with the statement (%)

## FINDINGS & DISCUSSION

Line graph chart to showing comparison among Male and Female student's responses for questions clearly shows that both have equal liking towards certain points while they deviate at points like preference related to reading, timing and matter. Both agreed upon learning through phone during their exam, assignments and presentation.

### Use of Mobile to get Better result or Marks

Most of the students believe that because of the phones; connectivity, resources and variety of information is available on tips and it helps them to get good marks or grades. This is more often stated by learners that they use their phones for gathering of learning material and of various data helps them secure good grades. 90% of students in given survey believed that phones are very useful and helped improve their grades. Most of them believe in precise and variety of notes is more advantageous than their class notes. *Ian Nuttall.(2013)* Found that, it makes note-taking easier by enabling you to take notes in text, images or audio recording. You can also easily access your notes from your home computer whenever you need to. He also suggested about some app which can be downloaded and enables students to create study aids like flash cards when you need to study quickly for quizzes or exams on the go. *Corbeil, J. & Valdes Corbeil, M. (2007)* have mentioned that students use many different ways of online learning using their smart phones for better performance. Mobile phones as communication tools, if engaged for educational purposes, can increase the significant learning and heighten students' motivation *Kukulka-Hulme, (2009)*. Students are naturally happier with their cell phones than with outdated textbooks, which increases reading and comprehension skills says *C.Aaron (2014)*. One of the participant of study said- "I love reading by phone during exams or tests as it gives less stress in comparison of those bulky text books of library" Thus securing better grades or marks is the most favorable argument for using mobile phones as learning tool.

### Language skills, Learning new subjects and Concepts

A small percentage of boys and girls students prefer mobiles as tool to learn languages and to know word meanings and new words. Most of them were found from Hindi medium background or from rural background. 45% Males and 56% Female students are interested in improving their language skills and even pronunciations and uses of new words. *D. University Mobile Devices in Education.,(2008)* found that mobile phones are used as an educational tools to help students with academic success. It helped them to learn new terms. Improvement of learning and increasing understanding of difficult concepts; Improvement of critical thinking skills and satisfaction of needs, abilities and interests of learners were other outcomes of *L.Hagos.(2008) and N.Cavus, and U.Huseyin.,(2009)*. A Girl participant said that- "I like to learn new words though google translator and different uses of those words to impress my teachers and classmates"

Around 50% students agreed upon their learning habits of news and latest stories worldwide trolling on social media. Females are equally interested in these news in air. Students used to Google most of the messages according to their choices and interest and are very much keen to know and revert on certain social media's vibrant platforms. Study partaker revealed that- "Most of the time we prepare for debate, essay or any other activity by phone only. We at times record our voice and practice" New words, concept and subjects attract younger generation to use their phones to be updated and as a personality grooming exercise. Majority of young people in India who have been surveyed by *Edutech (A World Bank survey on ICT use in education, 2017)*

had shown potential in mobile learning. Skill development was cited as the number one education need by students, with language learning a close second. Reading materials were also in relatively high need.

Study reveals facts about learning through Mobile or learning about mobile as tool were the popular along with Learning about different apps, available sources on web or recommended learning sites.

### Uses of Mobile phones for Projects / Assignments and presentations

Students prefer use their mobile phones for their presentations, assignments, home works and projects. **Mathur. A. & Gulati, D.(2015)** Suggested that, children are more comfortable and can coordinate in a better way, through phones and find it convenient way to complete their projects and assignment. Nearly 60% are saying they put off studying until the last minute and rarely study for small quizzes, and mobile devices help them study. Students use pen and paper, as well as technology although on average students use pen and paper during their study time, they also use mobile devices. **Schulten,K.( 2010 )** has compiled different ideas and summarized that students think, cell phones are used as major learning tools to complete projects it can help you stay organized and help you with your homework. Willingness to sit in library is old fashioned now and students prefer technology for their research projects and assignments. **C.Aaron.(2014)**. Participants said that-  
*“I believe in last minute study and my phone is my last minute mate”*

*“I prefer to keep my notes in phone and avoid notebook or text book during exams or class presentation”*

*“I love phone over laptop or books as it is easier to handle and keeping important data.”*

*“At times we prepare all our notes, presentation ideas, assignments and outlines of projects on whatsapp and it is always trouble-free and provide shared platform to all participants”*

It affirmed that, equipped with the all-encompassing power of a cell phone, students have a comprehensive library of information at their fingertips.

### Reading time preferences

Mobility, accessibility and flexibility are the keywords for mobile learning. 100% students learn something from their phone or use their phones as learning tool daily. On the contrary only 10% read or learn in leisure time it explained the time preferred for learning is depended upon necessity of learning. **Leslei K., (2013)**, says that, students do not prefer learning over gaming, social media, clicking pictures and listening music on their phones. Some of them use it weekly specifically for learning and mostly on alternate days.

Participants said that *“I read only during test or exam time.”* *“Most of us learn or search some study notes only during our exams”* *Exam pressure is the major influence of learning through mobile phones”*

Most of the students get along with their cell phones during leisure time but do not use it for learning anything affirmed by **Corbeil, J. & Valdes-Corbeil, M., (2007)**. A study conducted by **Wakefield Research and Course Smart** found that 53% of respondents would be more likely to complete a reading assignment in time if it were available on their mobile device, and 88% have used their mobile device to study for an exam last minute.

**Grabill’s., (2011)** found that students choose texting as the chief form of writing and phones as the best writing platform. Some of the participants in study opine about their practices of taking class notes on phone and a secret that they often record (Audio mostly) class lectures without letting it know to their teachers to retrieve information later when needed.

Some of them spoke out about the difficulty in learning through mobile phones as it put extra stress on eyes and consumes lot of time to search for an accurate material related to their subject matter.

Study explored that many students are suffering from eye strain, neck pain and shoulder pain due to excessive use of mobile phones and they too have become conscious about uses and aware about all problems. **Mathur A.,(2017)** Put stressed on the fact that, learning from mobile takes more cognitive and physical concentration than reading from printed material. There are lots of motives and factors which encourage the reading time preferences of students and mostly tests, exams or some last minute update were found frequently stated reasons.

### Reading preferences

Present study reveals 72% Male and 65% Female Students prefer reading books through online reading sites or downloaded books. 21% Male and 38% Female students prefer reading story books for time pass and female students were found more interested in reading story books than Males.

Many of female Participants disclosed that they were reading several online books, fashion magazines, Hollywood or other magazines online. *“We update news about celebrities and their lives.”*

*"I often search story books for time pass"*

*"Gossips about celebrities are most favorite segment in all kind of magazines, I love it"*

**Majid & Tan., (2007)** summarized that 57.6% of the school going children in Singapore prefer playing on computer or surfing the Internet whereas only 44.1% choose reading as their free time activity but same doesn't goes with students of higher education, that rather search their net for learning help at every point of time. **Peter., (2007)** said that the ease of use at different places of mobile phone helps learning anytime and everywhere in any of formal and informal settings, accordingly our mode of learning becomes different and effortless. **Lin-Chao Fu and others., (2014)** have found that, college students had no significant preference for reading. Reading preferences indicated that, the short notes, life sketches, philosophical ideas, case studies and definitions were the most common searches in student's list.

Study partaker said that *" I like to read short understandable notes for all my topics for exams and never ever prepare notes"* *"I rely on available study material for any exam"* *"I find it very easy to learn and have many options to choose for my understanding, that's why I prefer reading online matter on any subject"*

**Noa A, Judit Bar., (2016 )** have found that, the e-book reader revolution is already here with students and how electronic materials is related to advantage and comprehension of learners.

### CONCLUSION, RECOMMENDATION

Use of mobile phones for learning is still an evolving area for study, and more scholarly research must be conducted. Most importantly, individual experimentation is needed to understand what works, how, and why in both formal and informal learning environments. Practically, we need institutional changes that can facilitate and encourage students and instructors to integrate mobile technology into daily learning. Present research shows the interest of students towards mobile learning further students can collaborate to improve their grades; students can work together by using collaborative study apps on their mobile devices. Advantages of Mobile learning are various with personalized learning , Providing learning experience outside the classroom and making learning enjoyable by texting, uploading, recording, organizing and searching knowledge. It always benefits to an informal learning by helping and improving the confidence of the learners. It helps reducing forced uses of PC/ Laptops as the only object to have access to materials or knowledge earlier. Students are free to use their mobile phones anywhere and anytime.

Students can turn idle time into study time if allowed, the flexibility and mobility can be provided for use of smartphones and tablets is allowing students to studying all over the place. Students find it flexible, easy, comfortable, and available everywhere and anytime, this could be molded in a way to encourage learning environment for students. Mobile learning habits of students can be turned into learning friendly pedagogy in present system as tool to connect, communicate, collaborate and create using rich digital resources. It also to be considered that reading from phones are always tiresome exercise for eyes and there are several things affect the timing including light, battery and connectivity while using phones for reading.

### IMPLEMENTATION

The research provides an insight about frequent uses of mobile phones by students and as learning tool. This can be used to design a teaching learning model by using mobiles as tools. New researches on control groups using phones during their classes for knowledge and as resource can be assessed and implementation of such classes can be proposed within the working framework. Students of national capital region are from diverse areas of India and have come to add on their professional qualifications and their status of being hostlers or paying guests may be a major reason of their study habits. More experiments with different age groups and with different students can be explored to exchange the information and disseminate knowledge. Students of higher educational institutes can be targeted for more fruitful learning ideas with mobile phones. Students can be encouraged for using phones for class assignments or as open book test models. the crux of study is to highlight how young people can better use mobile phones responsibly and fruitfully at their learning boulevard.

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**COLLABORATED TEACHING AND LEARNING: INCLUSION OF FOLK MEDIA FOR INCREASED IMPACT IN RURAL AREAS****Malvika Singh**Research Scholar, Amity University, Noida

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**ABSTRACT**

*Learning is a never ending process. It involves gaining insights into something new at every juncture of life. Likewise teaching is a process of imparting knowledge to those who are in need of it to better them in every aspect of their lives. The process of teaching and learning go in hand. This process of exchange of ideas, information and knowledge carries on effortlessly in urban areas or cities in comparison with the rural areas. The reason being most of the content of the syllabus are designed in such a manner that the students from rural areas generally don't benefit as their urban contemporaries. This paper aims to assess the inclusion of folk media as a technique to make the process of collaborated teaching and learning equally rewarding for the rural areas. Folk media has been around for the longest period of time. We see its usage in sociological context, mainly in the transmission of culture from one generation to the next. It is used to express and propagate the existing ideas and information along with entertaining. The connection of rural masses with the folk media has always been evident. This paper aims at analyzing why and how the folk media should be included in the parlance of collaborated teaching and learning. The methodology that would be adopted is content analysis.*

*Keywords: Collaborated teaching, learning, folk media, technology*

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**INTRODUCTION: COLLABORATED TEACHING AND LEARNING**

The method of teaching which involves collaboration and cooperation between two or more teachers to teach, instruct and mentor students is called collaborative teaching. Collaborated learning is a similar approach in which there is collaboration between the students or students and the teachers. Both these concepts are interrelated and complement each other. Most often the collaboration occurs between the teachers of one or more disciplines and occasionally two or more teachers from the same department or grade level come together for the fulfillment of a common objective. For this method to be effective, the teachers involved should decide how much time should be dedicated in developing lessons and coming up with required teaching strategy. These strategies may differ from student to student or groups of students. At times in order to be more precise and effective the teaching content is planned well in advance, at times as early as a year so that every teacher who is a part of the collaboration is aware of the lessons and how to impart them effectively. The teachers involved spend time not only during school but also after that to coordinate their strategies. The pairing of teachers becomes instrumental in deciding the success of the strategy as like-minded or teachers who have better tuning between them are more likely to impart knowledge in a better fashion. The teachers who become a part of collaborated teaching are expected to not only bring their best strengths but also be able to adapt to new methods in order to benefit the students. This method of collaborated teaching is beneficial for both teachers and students alike as it not only allows teachers to hone their teaching skills and add variety to their methodologies but also helps students to gain insights through various teaching approaches. This methodology also puts forth a perception that every teacher who is a part of the collaboration is equal and has the same level of knowledge and understanding. This in turn becomes conducive of a more respectful teaching and learning environment. The teachers who are a part of the collaboration can learn from one another and expand their own horizons. Collaborated teaching includes identifying the academic needs of students, making session plans, implementing them and assessing the progress of the students. It helps in increasing the students' learning potential which is why it is one of the most effective teaching and learning tools. Teachers who are a part of collaborated teaching are of the view that students who learn through this methodology fare better than the students who learn in traditional classroom setup as the lesson plans and other tools of teaching and assessing are more student-centric. Also, it makes the students more reflective and inquisitive.

Collaborated learning involves making groups of students to work together to achieve a common educational goal. This is based on the fact that social interactions that have similar context are more likely to be successful. The method of collaborated learning perpetuates the concept of critical thinking which aids the students in all their future endeavors as their thought process becomes more profound and they are able to make informed and wise decisions. The students who work and learn in collaboration tend to develop higher level of thinking ability and can retain information for a relatively longer period of time in comparison to the students who learn solely. This is based on a theory which states that learning takes place when students actively participate in the construction of new lesson plans, instead of waiting passively for the teachers to provide them with necessary

knowledge and wisdom (Vigotsky, 1978). The onus of learning is on the learner instead of the teacher as he/she is treated as a researcher in search of information and knowledge. The students do so by discussing among themselves thereby developing their own critical thinking and decision making abilities. This is more like brainstorming where different ideas from different students flow and an exchange of information takes place. Collaborated learning induces discussion as the group is usually made of individual students who have a different set of thought process each. This way they not only arrive at a conclusion that is most logical but also they learn to accept contradictory viewpoints and act as a team towards the fulfillment of a common academic goal.

### **CORE ELEMENTS OF COLLABORATED LEARNING**

There are many benefits of collaborated learning, including increased critical thinking and ability to work in teams. But there are basic five elements given by **Johnson, Johnson and Smith** in 1994.

1. **Positive Interdependence** - In this element the students who form a part of the group have a fair idea that they have to work towards a collective goal that will not only benefit the group altogether but also benefit them individually. Through positive interdependence, the participants continue to encourage each other thereby contributing to the success holistically.
2. **Individual Accountability** –This element makes sure that each and every participant of collaborated learning contributes to the goal both individually and collectively. The students are expected not to feed off of other group members' hard work.
3. **Face-to-Face Promotive Interaction** –The students who are a part of the team or collaborated learning tend to promote each other's individual productivity which in turn aids the productivity of the team on the whole.
4. **Interpersonal And Small Group Skills** –Social skills that involve interpersonal and group skills are essential for the functioning of the group. These skills include group formation, group management, understanding building, negotiation and conflict management.
5. **Group Processing** –This element involves the participation of the team members to evaluate the success of the group and maximize the efforts that lead to the success.

The method of collaborated teaching and learning has proved that if objectives are defined specifically then it becomes easier to achieve the collective goals, both for the teachers and the students. This method relies on the fact that team work is more likely to succeed in comparison to the individualistic approach. This approach not only increases the critical thinking among students but also enhances the strengths of the teachers who are a part of the collaborated teaching and learning.

### **FOLK MEDIA IN INDIA**

India is a land of folklore. She has a rich past when it comes to folk media. Each state has its own set of folklore in the form of songs, dances, ballads, skits, legends and myths. There is diversity in the folklore in our country and it is also participative in nature. Folk media in India came into being with the need to communicate and to perpetuate the tradition from one generation to another. There were other reasons also such as education, entertainment, social exchange etc. R.M. Dorson categorized folk media into four categories – Oral culture, Material culture, Social customs and Performing folk arts (Madhusudan, 2006). Folk media is one of the most effective channels of communication as it not only helps people stay connected to their roots but also slowly but steadily revive this form. The channels of communication that fall within the purview of folk media give the rural people especially a chance to voice out their own opinions. In India we have a traditional society which has folk forms such as dramas, songs, ballads, skits, riddles etc deeply entrenched in it. Folk media is also used to pass on the information and knowledge from one generation to another. Hitherto, the folk media has been used in traditional rituals such as marriage ceremonies, funerals, name keeping ceremonies, birth, death etc but today the folk media can be used in community mobilization, motivation and education. In India we have a variety of folk media from different states such as dramas, puppetry, songs, skits, story -telling, street theatre, dance, motifs and paintings.

**Drama:** Drama is one of the most popular folk media in India. It basically pertains to the rural areas where farmers would return from the fields after a long day's work and would want to rejuvenate themselves. They perform dramas picking actors from among themselves and using vegetable colors for the makeup. The themes of the dramas pertain to their mundane lives, their joys and sufferings and mythology.

- **Tamasha** –This form of folk media belongs to Maharashtra. If we watch a performance of Tamasha, we will find the tales of great Maratha warriors, ancient rulers and stories from Ramayana and Mahabharata.

- Nautanki –This folk form can be found in North India and is often vulgar in content. It is rooted in the peasant society and includes songs and dances with loud drumbeats. This folk form, unlike Tamasha doesn't take cues from mythologies like Ramayana and Mahabharata.
- Khayal –This folk form mainly belongs to Rajasthan and it is a combination of drama, dance and songs. Music is an essential component of Khayal as it not only provides entertainment but also becomes medium of communication between and among the actors. It also includes instrumental music in the beginning of the show which helps in setting the right atmosphere for the show to commence.

**Street Theatre:** Street theatre literally translates into “Nukkad Natak” since they are performed in streets and market places for all to see. The performers are of the belief that they should be on the same level as the audience. This form of folk media helps performers in establishing a connection with audience. The most important element of street plays is the eye contact with the people who are watching. The performers keep the performances so natural that the audience also feels like being a part of it. Street theatre is performed on streets so that the performers as well as the audience together feel a sense of responsibility and belongingness towards each other. The themes of the street plays pertain to socio-cultural topics such as dowry system, female feticide, illiteracy etc. The street theatre is mobile in nature which makes it even more capable of reaching out to the audiences which mostly comprise of rural people.

**Puppetry:** Puppetry is a folk form that includes various types of puppets. In this, a story is woven around a theme and the enactment is done through the puppets and not real people. Puppetry is a famous folk form all over the world. In India they are known as ‘putrika’ or ‘putul’. There are various types of puppetry that can be seen in different states which can be categorized into four basic types:

- **Glove puppets** –This type of puppetry is found mainly in Tamilnadu, Kerala and Orissa. In this, the puppeteers wear them as gloves and manipulate the actions of puppets by their own hands. In Orissa they are called as Kundahei Nach. In Tamil Nadu, they are more ornate and detailed with nuances, like Kathakali. That's why there, they are called Pawa Kathakali. The narratives are mainly taken from the mythology, especially that of the tales of Radha and Krishna.
- **String puppets** –This type of puppetry is done by attaching strings to the puppets on various joints and suspending them through strings. This type of puppetry is found in Tamilnadu, Orissa, Karnataka, Assam and Rajasthan. Examples include the Kathputli show of Rajasthan, Bommalattam of Tamilnadu and Gombeyatta of Karnataka
- **Rod puppets** –This type of puppetry is an extended or bigger version of glove puppetry. In this, the puppets are fixed on rods and attached to the waists of the manipulators. Example are Putul Naach of Bengal and Yampuri of Bihar.
- **Shadow puppets** –In this form, silhouettes of the puppets are projected in a dark room which creates a dramatic impact. The shadow of the puppets fall on a screen which is mainly made of sheets. Examples are Tholu bommalata that belongs to Andhra Pradesh

**Music and Dance:** This form of folk media is deeply entrenched in the rural stratum of India. Song and dance are a part of our day to day routines and have been in practice since times immemorial. The folk songs and dance patterns vary from region to region but it mainly incorporates the rhythm and beats. Music and dance have always been a part of celebrations or any other rites of passage like child birth, marriage or death. Even the seasons are celebrated through songs and dance. Bhajan, quawwali, ghazal, sohar etc are few examples of the songs whereas bhangra, gidda, kaalbelia, laoni, jhijhia etc are the examples of the dance routine.

**Story Telling:** This folk form takes cues from mythologies like Ramayana and Mahabharata and tell them as stories that have moral. Stories that pertain to bravery, kindness, intelligence and wisdom are told to the audience. Storytelling is one of the main reasons we in the new age also are aware of the things that happened thousands of years ago.

#### FOLK MEDIA OF BIHAR

The reason why specifically folk media from Bihar have been mentioned is that the researcher belongs to Bihar and is well acquainted with the folk forms mostly used in the rural areas of the state and how they make an impact in the lives of rural people. Folk Media in Bihar have evolved over a period of thousand years. They basically include songs, dances, rituals, theatre and story-telling.

- **Bidesia:** This folk dance form was given by Bhikhari Thakur in 20<sup>th</sup> century. This is practiced mainly in the Bhojpuri speaking belt of Bihar. Bhikhari Thakur is known to be a crusader of equality between the classes and this reflects in the dance form. He used dance as a medium to tell people about the conflicts between rich and poor, upper and lower class, and haves and have-nots.
- **Biraha:** This is the combination of song and dance in which the pain of a woman who is left behind by her husband who has gone to the city to earn money is depicted.
- **Paika:** This is a dance form that depicts the courage and combat skills. In this, the performers wear bright color dhotis and turbans, and carry wooden swords and shields to enact a mock combat. This dance form is famous in the Mayurbhanj region.
- **Jhijhia:** This is another popular dance form in Bihar which is performed mainly by women. This dance form is performed during the no-rain time and the women pray to the rain god Indra. The songs are sung with the help of harmonium, dholak and flute.
- **Kajari:** This too is a combination of song and dance. This folk form is performed by women in the month of 'Shravan' or the beginning of monsoon and lasts an entire month. Kajari is a way to show appreciation to the rain gods about how green and beautiful the earth looks due to rains.
- **Jat Jatin:** This folk form is performed by couples who often wear masks. It is most popular in the Mithila region of Bihar. In this dance form, social issues are depicted and sometimes natural calamities like flood and draught.
- **Jhumri:** This is also a dance form which is more like Garba of Gujarat in its execution. Jhumri is exclusively performed by the married women in the month of 'Ashwin' to celebrate the change in weather through songs and dance.
- **Fagua:** This is performed in the form of songs in the month of 'Falgun'. This folk form is popular in Mithila region and is sung during the festival of Holi with the help of dhol, manjeera and khartal. In this folk form the mythological story of Prahlad, his father Hirankashyap and aunt Holika is sung with fervor.

Folk media in India is deeply entrenched in the rural social fabric. People not only perform but also enjoy folk media even after the advent of other media such as radio, television and internet.

### **FOLK MEDIA AS A TECHNOLOGY IN COLLABORATED TEACHING AND LEARNING IN RURAL AREAS**

Folk Media has been a great source of information dissemination over centuries. Its reach among the masses is unmatched, especially when it comes to the masses living in the rural areas. Newer media like television, radio, newspaper, and lately the social media have been doing their work religiously but there are obvious obstacles in their respective paths. For broadcast media like radio and television, infrastructure is necessary, which includes electricity and a radio and television sets. A television is still a luxury in the rural areas. Due to low level of literacy, newspaper is not a viable channel for the dissemination of information. People residing in the rural areas are either illiterate or semi-literate, meaning they can hardly write their own name. To talk about the new media or the social media or the digital media, it is still to make inroads in the rural areas. So, the most viable channel of communication that we are left with is the folk media. Folk media connects with the masses instantly as the performers know the pulse of the rural masses and make the people feel connected. These folk media make rural people feel more at ease, which is why it becomes easier for the rural masses to imbibe the message that is being disseminated by them. They have following advantages:

- Folk media are deeply connected with the rural masses.
- They have a variety that suits the various needs of the rural masses.
- They command support from the rural people.
- They are flexible in nature and are able to accommodate the changing themes and social issues.
- People of all age groups are able to connect with the folk forms.
- They are relatively inexpensive.

Folk media can be utilized as a technology in the field of education for better dissemination of knowledge to the rural students. The participants of collaborated teaching and learning can take into consideration these qualities of folk media and draft their lesson plans accordingly. The process of collaborated teaching and learning

includes the participative approach in which more than two teachers can collaborate or a group of students can learn collectively. Since the content of folk media has always been flexible, it can adjust the lesson plans with ease. The teachers can include one or more folk forms to disseminate the lesson plans to the rural students. This approach can make it easier for the students to get a grasp of the content. The rural masses are more receptive of the folk media so it could be relatively easier for the teachers to teach with desired impact. The conventional methods of teaching or the regular classroom teaching also have their impact on the students but the content incorporated with the folk media would be able to create an impact which the participants of collaborated teaching and learning seek.

Now the question arises which folk form can be chosen to incorporate the lesson plans effectively? Since there are various folk form that are in existence in our country but to choose those folk forms that can easily incorporate the lesson plans and can be easily disseminated is an issue. The combination of collaborated teaching and learning with folk media can prove to be effective if the right folk forms are chosen. As much famous as all of the folk forms are but in the context of education only few folk forms could be suitable including Story Telling, Theatre and Songs. Creating content on the part of both teachers and students will do the trick.

- **Story Telling:** The teachers can collaborate to create tales or stories that have a moral focal point in it or they can make stories that incorporate their lesson plans. Since the lesson plan will be in the form of a story, the students will pay more attention towards it, and imbibe it better and fast. Likewise the group of students who are participative in collaborated learning can also come up with stories that have elements of lesson plan and share among themselves so that they can learn it easily.
- **Theatre:** This will be a more elaborated version of storytelling. The teachers who are part of the group can draft a play revolving around the lesson plan or keeping it as the central theme. Next the teachers can ask the students to play parts or roles in the play. Likewise students who are participating can develop the content of the play according to their own individual capabilities. Role playing can enhance their understanding of the content which includes the lesson plan or the knowledge intended for them.
- **Songs:** Whatever is intended to be taught to the students can be presented to them in song form. This folk form will not only be entertaining but also be grasped by the students easily. If the lesson plan is explained to the students in song form, they will be able to remember it quickly and more effectively as songs are the medium that are catchy. The teachers can compose the lesson plan in the form of a song or the students themselves can incorporate the study material in the song form. This will help them to not only learn the lessons quickly but also retain the information intended for them.

## CONCLUSION

Collaborated teaching and learning has been a relatively potent tool of education. In this method one or more teachers come in collaboration to disseminate the lesson plan to the students. Likewise, in collaborated learning a group of students work among themselves to come up with strategies to imbibe the lesson plan better. It has been proved that group teaching and learning give better results. Folk media in India have been deeply rooted in the rural social fabric. People feel attached with the folk media in our country and feel more receptive towards the message disseminated through the folk forms. Keeping this fact in context, if the folk media are incorporated in the concept of collaborated teaching and learning, the desired outcome can be achieved. Since the lesson plans will be presented in folk forms, the students will be more attentive and receptive towards it. This will result in the better dissemination as well as understanding of the educative material.

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**USE OF UNSUITABLE WORDS IN CYBER HINDI JOURNALISM**

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**ABSTRACT**

*Media is a way by which we communicate to large number of people. Two things are very important for communication in Media - content and language. We can't communicate without effective language. Different sections of the society have different languages. Bookish language has different style. In the same way common dialogue has no similarity with bookish language. Basically the language of media is not so difficult like bookish and not so easy like the conversation of common people. Grammar of bookish language and easy style of common dialogue create the language of media. This is the reason why media language has impact of easiness on its readers. Cyber Hindi Journalism is a type of new media which has special impact on youths. No doubt, Cyber Hindi Journalism is a platform to learn Hindi words because more youths are convent educated where Hindi has no wider space. When we talk about use of Hindi in media, We find many words, which are used in Cyber Hindi Journalism, give unsuitable meaning, for example- vriksharopan (वृक्षारोपण). This word is not suitable. How anyone can plant a tree (वृक्षया पेड़)? A plant (पौधा) can be planted but not a tree. Plantation is a process in which a plant is uprooted and then planted like a paddy plant. How a tree can be uprooted and after that it will be planted? Neither uprooting a tree is possible nor plantation of the same tree is possible.*

*In this research paper, such type of words which are used with unsuitable meaning in Cyber Hindi Journalism will be highlighted. This paper will be useful for journalists and readers also.*

*Keywords: Cyber Hindi Journalism, Media, Bookish language*

**INTRODUCTION**

Presentation is important part of media. After gathering information, the content is presented in the suitable form of the particular media. In newspaper and magazine, the content is given in text and photo form. In Radio, audio form is adopted. When we talk about TV, we can say that one can use here text, audio, video, photo etc. The content is produced according to the format of the media and after that transmitted for the audience/readers. The work in media is done in a hurry. Therefore, so many mistakes are left in newspaper and other media. Suitable words convey the exact meaning. When the word is not suitable that will give different meaning. The readers may face problems to understand the proper meaning. It is remarkable point that one word has many meanings. This research paper underlines the importance of suitable words in media.

**REVIEW OF LITERATURE**

Grammar decides the path for language. Without grammar, language can't run because grammar has some rules and regulations. Rules and regulations are necessary for everything. No one can proceed in his life without rules. Therefore language has grammar that is known as discipline of the language. So many work has been done regarding Hindi language. Kamta Prasad Guru, Boal Nath Tiwari, Badri Nath Kapoor many other scholars has written books on Hindi Grammar. Cyber Hindi language is new area so no solid work is found in this area. However we find some articles in magazines, newspapers, websites about Cyber Hindi language.

**RESEARCH METHODOLOGY**

This research paper is based on analytical study. The meaning of a word in a headline is explained on the basis of grammar and logic. Regarding Research Methodology about this research paper, it can be said---

- Analytical approach has been adopted.
- More than 100 headlines published two Hindi news websites---www.hindustanlive.com and www.navbharattimes.indiatimes.com have been analyzed.
- This is quantitative research.
- Grammatical aspect has been focused in this study.

**ANALYSIS**

As mentioned above, 100 headlines were covered for this study.

Here is analytical study of some headlines-

In a headline, the word दोष (demerit) was used-

सिर्फ महिलाओं के दोष दूर करता था बाबा 1

- The word दोष is opposite of गुण (merit) in Hindi. It is also used in Hindi as गुण-दोष (merit-demerit).
- Goswami Tulsidas has also used the word अवगुण for दोष in Vinay Patrika-

प्रभु मेरो अवगुण चित ना धरो।

O God, don't mind on my demerits. It can be said that अवगुण is related to nature of a person.

परेशानी means worry, trouble, discomfort.

In the above headline, the word दोष (demerit or fault) is not suitable. The suitable word is परेशानी that reflects discomfort or trouble.

The headline may be-

Baba used to remove troubles of women only.

In Hindi it can be written as-

सिर्फ महिलाओं परेशानियाँ दूर करता था बाबा

It is clear that the word परेशानियाँ is more suitable than the word दोष.

### चुनाव and चुनावों (Election and Elections)

There was a headline published on a news website:

2019 के आम चुनाव में बिना

किसी चेहरे के उतरेगा महागठबंधन: शरद यादव 2

Here the word चुनाव is used in the headline. चुनाव is singular form but when Lok Sabha elections are conducted, the plural form of चुनाव should be used because in Lok Sabha, elections are conducted in so many areas and so many people fight the elections. So how we can say only चुनाव or election? It will be better to write चुनावों or elections.

The revised headline may be-

2019 के आम चुनावों में बिना

किसी चेहरे के उतरेगा महागठबंधन: शरद यादव

### No suitable use of पर (on)

धारा 497- सुप्रीम कोर्ट के फैसले

पर दिल्ली महिला आयोग असहमत 3

One can be agree or disagree with any decision. कोई किसी के फैसले से सहमत या असहमत हो सकता है लेकिन किसी के फैसले पर सहमत या असहमत नहीं हो सकता। हाँ, किसी के फैसले पर अपनी सहमति या असहमति जरूर जता सकता है। One can express his/her agreement or disagreement on the decision given by anyone. So in the above mentioned headline the word से should be used in place of पर.

धारा 497- सुप्रीम कोर्ट के फैसले

से दिल्ली महिला आयोग असहमत

### करी and की

की is the past form of the verb करना but the word करी is not grammatically correct, however it is used in spoken Hindi by some people. 4 The word करी was used in a headline-

पुलिस का मनोबल गिराने की बात करी तो काट देंगे जुबान 5

The suitable use of the word is की not करी. So the headline can be written as-

पुलिस का मनोबल गिराने की बात की तो काट देंगे जुबान

### बयान and बोलना

तनुश्री और नाना पाटकर मामले में अमिताभ बच्चन ने दिया ये बयान

बोले- 'कैसे उत्तर दूँ' 6

बयान means statement and बोलना means to speak. Both words indicate the same meaning. Without speaking, no verbal statement can be given. In the above headline, the use of both words in the same headline is not suitable. we can use only one as-

Either

तनुश्री और नाना पाटकर मामले में अमिताभ बच्चन ने दिया ये बयान

'कैसे उत्तर दूँ'

or

तनुश्री और नाना पाटकर मामले में अमिताभ बच्चन बोले- 'कैसे उत्तर दूँ'

### निशुल्क and निःशुल्क

निःशुल्क means free of cost but there is word in the dictionary that is written as निशुल्क.

निःशुल्क can be written as निशुल्क 7 also.

In a headline the word निशुल्क was used-

अच्छी खबर: गरीब बच्चों को 12वीं

तक निशुल्क शिक्षा देने की तैयारी 8

Here the word निशुल्क is not suitable.

### FINDINGS AND CONCLUSION

No doubt, language is an important part of media because without language how content can be expressed. The notable point is that when there is any fault in the content, the media house is under question mark but when there is any mistake related to language that does not matter.

On the basis of the study of 100 headline, 40% headlines have one unsuitable word.

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**LIFELONG LEARNING: CONTINUING PROFESSIONAL DEVELOPMENT**

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**ABSTRACT**

*This paper reveals about the contribution of continuing professional training and development activities and their impact on teachers professional learning and outcomes for students. Learning is defined as the process whereby knowledge is acquired. It also occurs when existing knowledge is used in a new context or in new combinations. Since this also involves the creation of new personal knowledge, the transfer process remains within this definition of learning. Lifelong learning is more than training or continuing education. It must support multiple learning opportunities including exploring conceptual understanding as well as narrowing to practical application of knowledge, ranging over different settings such as academic education, informal lifelong learning, and professional and industrial training.*

*Keywords: Training, Education, Development, Lifelong learning.*

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**INTRODUCTION**

Learning is an important phase of human life. It is a basic factor in education. Its growth in the adaptation of behaviour to a wide variety of situations and circumstances. Learning is a comprehensive term and includes varied activities and experiences which have an important influence on the behaviour of an individual. According to **Crow and Crow**, "Learning involves the acquisition of knowledge, habits and attitudes".

Lifelong learning is a phrase that continually appears in the literature from a variety of areas including the government, academics, and the media. The concept and provision of lifelong learning is by its very nature highly complex and multifaceted. Professional development is one of the aspects of lifelong learning, and that teaching is a significant component within the context of learning. The approach, of lifelong learning has gained currency through attempts to harness it as a means of providing people with the knowledge and skills they need to succeed in a rapidly-changing world. Increasingly teaching is the word at the centre of debates about learning with the premise that good teaching leads to effective learning.

**OBJECTIVES**

- To employ the more effective methods of teaching, professional efficiency and formal process of self-development of the teachers.
- To develop positive attitudes in order to make them able to help in the progress of the nation.
- To know the help individuals, organise and manage their own daily learning.
- To help teachers to know their problems and to solve them by pooling their resources and wisdom.

**I. LIFELONG LEARNING**

Lifelong learning may be broadly defined as learning that is pursued throughout life: learning that is flexible, diverse and available at different times and in different places. Lifelong learning crosses sectors, promoting learning beyond traditional schooling and throughout adult life (i.e. post-compulsory education). There are:

**Learning to know** - Mastering learning tools rather than acquisition of structured knowledge.

**Learning to do** – Equipping people for the types of work needed now and, in the future, including innovation and adaptation of learning for future work environments.

**Learning to live together, and with others** – Peacefully resolving conflict, discovering other people and their cultures, fostering community capability, individual competence and capacity, economic resilience, and social inclusion.

**Learning to be** – Education contributing to a person's complete development: mind and body, intelligence, sensitivity, aesthetic appreciation and spirituality. This is underpinned by "Learning to Learn".

Lifelong learning can instil creativity, initiative and responsiveness in people thereby enabling them to show adaptability in post-industrial society through enhancing skills to: manage uncertainty, communicate across and within cultures, sub-cultures, families and communities, negotiate conflicts. The emphasis is on learning to learn and the ability to keep learning for a lifetime. Universities have a particularly strong part to play in acting to promote lifelong learning. The importance of universities as key bodies in laying sound foundations for

lifelong learning highlights the consequent need for appropriate levels of government funding for their roles. The European Commission found that lifelong learning has “Four broad and mutually supporting objectives: personal fulfilment, active citizenship, social inclusion and employability”. In this regard, lifelong learning has life wide dimensions that transcend narrow economic and vocational aspects.

### **HISTORICAL BACKGROUND OF LIFE-LONG LEARNING**

The evolution of the political discourse on lifelong learning can be divided into three phases. Until the late 1970s, the lifelong learning discourse was heavily influenced by a humanistic vision, and its focus was on the design and development of learning within educational institutions. The Faure report *Learning to Be*, advocated lifelong education as the master concept for educational policies in both developed and developing countries. It was seen as a turning point and the start of a period of optimism in International education policy, as it recognized that education was no longer the privilege of an elite, or a matter for one age group only. Instead, it concluded that education should be both universal and lifelong. Essentially, this meant moving to a humanistic, rights-based and holistic view of education. It was in 1996 that UNESCO published a report titled *Learning: The Treasure Within*. The OECD also published a report titled *Lifelong Learning for All*. Both documents emphasized the multiple contexts of learning and firmly linked the concept to the economic, social, cultural and environmental challenges that societies and communities face.

The political focus on lifelong learning shifted to labour market security and economic competitiveness, and so there was a stronger orientation towards the principles of human capital and employability. In the European Union, the lifelong learning discourse entered a third phase from the year 2000, influenced by the EU’s goals of creating the most dynamic knowledge-based economy in the world and ensuring social cohesion. Devised in 2000, the Lisbon Process (the EU’s plan for economic growth) “made Education and Training a generally accepted policy area for the first time in EU history” and led to the development of national lifelong learning policies within the European Union. The ideas of the Lisbon Process are reflected in similar conceptions of lifelong learning across the European countries (e.g. European Commission, Memorandum on lifelong learning; European Council, Council resolution on lifelong Learning; European Parliament, Commission proposal for the introduction of a new action program to promote lifelong learning in the 2007-2013 period.

The principle of lifelong learning is by now a global norm or “new master narrative” in education policy, promoting a certain understanding of how education systems should be built in order to meet the challenges of the knowledge economy. National governments are increasingly relying on similar principles and values in relation to lifelong learning. The danger here is that these governments adopt global concepts without sufficiently considering the specifics of the national context. Furthermore, the discrepancy in many UNESCO Member States between general advocacy on the one hand and a lack of clarity on the definition of lifelong learning on the other has consequences for the operationalization of lifelong learning, as it is leading to inefficient implementation of policies and strategies.

In terms of governance, Education is a complex, multilevel system, ranging from supranational agendas to local programmes and activities. Education systems are not formed by any one actor, such as the government; instead, a multitude of actors at different levels are involved in establishing and changing an education system. This calls for openness towards a variety of concepts and theories about lifelong learning. It is important to acknowledge that diverse practices of lifelong learning play a vital role in the evolution of the theoretical concept. It is also useful to provide examples of differentiated approaches to the concept that can be operationalized and that can further our understanding of the benefits and challenges of designing a global mechanism for measurement and monitoring.

### **II. CONTINUING PROFESSIONAL DEVELOPMENT (CPD)**

CPD stands for Continuing Professional Development. It refers to the process of tracking and documenting the skills, knowledge and experience that you gain both formally and informally as you work, beyond any initial training. It's a record of what you experience, learn and then apply. The term is generally used to mean a physical folder or portfolio documenting your development as a professional. This article is about CPD as a process of recording and reflecting on learning and development. The CPD process helps us manage our own development on an ongoing basis. Its function is to help us record, review and reflect on what you learn. It's not a tick-box document recording the training we have completed. It's broader than that.

#### **The Difference between Training and Development**

These terms are often used interchangeably, though there is a distinction. As a rule of thumb, training is formal and linear. It's to do with learning how to do something specific, relating to skill and competence. Training can be as simple as using a PC application and as complex as learning how to be a pilot. Development is often

informal and has a wider application, giving you the tools to do a range of things and relating to capability and competency. It involves progression from basic know-how to more advanced, mature or complex understanding. Alternatively, it can be about widening your range of transferable skills like leadership, managing projects or organising information. It has been described as intensive and collaborative, ideally incorporating an evaluative stage. There are a variety of approaches to professional development, including consultation, coaching, communities of practice, lesson study, mentoring, reflective supervision and technical assistance.

**The features of the CPD process:** To justify the name, a CPD needs to

- Be a documented process
- Be self-directed: driven by us, not our employer
- Focus on learning from experience, reflective learning and review
- Help us set development goals and objectives
- Include both formal and informal learning.
- Provides an overview of our professional development to date
- Reminds us of our achievements and how far we have progressed
- Directs our career and helps us keep eye on our goals
- Uncovers gaps in your skills and capabilities
- Opens up further development needs
- Provides examples and scenarios for a CV or interview
- Demonstrates our professional standing to clients and employers
- Helps us with our career development or a possible career change.

### **III. PROFESSIONAL DEVELOPMENT IN THE CONTEXT OF LIFELONG LEARNING**

It is important for the discussion to clarify some of the meanings of the various terms associated with professional development, as they have come to mean a variety of things to those associated in education. Watkins and Drury suggest that there are four groups of strategies for the development of professionals over the next decade:

- Developing a new mind set;
- Learning to promote and market one's skills, networking and cultivating relationships;
- Developing self-insight and taking personal charge;
- Developing a range of competencies.

Here, it is useful to examine the term "professional" when applied to teachers. Garnett suggests three key dimensions:

- A professional will have undergone a lengthy period of professional training in a body of abstract knowledge, and will have experience in the relevant field, in this case teaching.
- A professional is controlled by a code of ethics and professional values.
- A professional is committed to the core business of the organisation, i.e. the quality of student learning.

If we have key dimensions to what a professional is, and four strategies by which they develop, what role does professional development play? Within this paper professional development is taken as meaning development for individuals or groups with like needs identified by them or the institution, is career orientated or personal and is long term. It is a generic term, and similar to O'Neil will be used in that context. Although these parameters set the scene for discussion, it does not make explicit the connection between professional development, teaching and the role of lifelong learning. A significant amount of research has discussed the role of professional development and the professional, but the role of teacher's learning has not always been made explored and explained.

Professional development in Higher Education is a way to improve the quality of learning and teaching of the researcher/teacher, and develop a culture for lifelong learning. This can be achieved through the recognition of

the importance of teaching, the teacher, and attributing the status needed to gain that recognition. Opportunities for individuals to extend their knowledge base, skills and teaching activities must be provided for. Hargreaves and Fullan suggest that "Teacher development as knowledge and skill development" is key to successful long-term learning, both of the teacher and their students.

This leaves lifelong learning and its role within professional development to be discussed. Lifelong learning has to do with the development of a range of interactions between educational institutions and their host communities, in this case researchers/teachers, students and Higher Education establishments. All are, or should be, concerned to develop a learning community, where learning is valued, both for the teacher and the student. This must include professional development of those who help to provide learning at all levels. At the level of the individual teacher, systems/authorities should offer opportunities for teachers to participate in professional development work in preparation for lifelong learning if they are to transform the concept of teaching in the way that will enhance learning, and therefore, develop the concept of lifelong learning.

The premise here is that the provision of lifelong learning is heavily dependent on the skills, knowledge and professional competency of the teaching profession. The challenge will be to extend and broaden the frameworks of teaching and learning activities in Higher Education. This must incorporate teachers and teacher educators, as they will be at the "coal face" of change. By change, I mean a changing community of learners. Hargreaves and Fullan have showed how teacher development are enhanced when the importance of the working environment is considered. Garnett also states that the development cannot be alienated from the context of practice. The context may vary across institutions and within Schools or Faculties, all of which are influenced by structures and strategies, that are both formal and informal, internally or externally imposed. The professional development is orientated towards the working lifetime of a professional (researcher/teacher) and that professional development is one element of lifelong learning. If such a premise is to be accepted, there is a need to consider the role of learning for the professional, and how this may affect the role of teaching in Higher Education.

Lifelong learning in the workplace Since the early 1990s the term 'lifelong learning' has become closely associated with notions of adult education. Lifelong learning can be defined as 'all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. According to this definition professional development at work is effectively a means of engaging in lifelong learning. It can be viewed from a number of perspectives on the one hand, it can be seen as 'a new liberal notion of self-fulfilment' on other hand. Here the emphasis is on the individual's needs and aspirations. However, it can also be viewed as a mechanism for control and regulation under which 'structures of accreditation, resourcing, and access could be interpreted as attempts to constrain and regulate individual and organisational choices about learning into forms that have been prescribed by authorities of various kinds.

#### **IV. THE EMERGING TECHNOLOGIES AND LIFELONG LEARNING**

Lifelong learning is defined as "all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective". It is often considered learning that occurs after the formal education years of childhood (where learning is instructor-driven—pedagogical) and into adulthood (where the learning is individually-driven—andragogical). It is sought out naturally through life experiences as the learner seeks to gain knowledge for professional or personal reasons. Knowledge results from the combination of grasping experience and transforming it'. The concept of lifelong learning has become of vital importance with the emergence of new technologies that change how we receive and gather information, collaborate with others, and communicate.

In India and elsewhere, the "University of the Third Age" provides an example of the almost spontaneous emergence of autonomous learning groups accessing the expertise of their own members in the pursuit of knowledge and shared experience. No prior qualifications and no subsequent certificates feature in this approach to learning for its own sake and, as participants testify, engagement in this type of learning in later life can indeed 'prolong active life'.

#### **The benefits of Lifelong Learning**

**There are a number of advantages to this form of studying includes**

- To gain a new qualification
- To add to our transferable skills
- To increase our employability and promotion prospects
- To earn more money

- To fill skills gap
- To broaden our knowledge
- To contribute for the betterment of the community
- Mental stimulation and also
- Personal and professional satisfaction

### **The Activities for Lifelong Learning**

**a. Utilise Technology** – Whatever subject we are interested in, there are a wealth of online resources out there to help us to learn. Listen to podcasts, download eBooks, take a distance learning course or join forums to continue our development.

**b. Stay Motivated** – Because this form of learning is completely voluntary, it will often require self-motivation and dedication to stay focused. Offer ourselves incentives to keep going, or ask a friend or family member to help us stay on track.

**c. Add some Structure** – Try setting aside the same amount of time for studying each night, or each week, make sure we stick to it, and try and write down a goal for each session. Take our learning seriously, and we are far more likely to stick to it.

**d. Take every Opportunity** – It isn't just a new certification we can gain from lifelong learning. There are plenty of opportunities out there to add to our knowledge, from taking a class in the local community centre, to joining reading groups or even watching webinars.

**e. Don't make Excuses** – Finally, there are no barriers to lifelong learning. Free courses are out there in everything from accountancy and business management through to marketing, coding and tech. And there's nothing stopping us simply picking up a book and learning about a new subject. So, no matter how young or old we are, and no matter how much time we have, there's something out there for us.

The most complete break with behaviourism occurred at the end of the first quarter of the 20th century with the importation of the notion of insight learning in the Gestalt theories of the Germans Wertheimer, Koffka, and Kohler. These theorists took issue with the proposition that all learning consisted of the simple connection of responses to stimuli; insisting that experience is always structured, that we react not to just a mass of separate details, but to a complex pattern of stimuli. We also need to perceive stimuli in organized wholes, not in disconnected parts. In this concern, psychologically his or her perceptual field presented by four laws:

#### **1. The law of Proximity**

The parts of a stimulus pattern that are close together or near each other tend to be perceived in groups; therefore, the proximity of the parts in time and space affects the learner's organization of the field.

#### **2. The law of Similarity and Familiarity**

Objects similar in form, shape, colour, or size tend to be grouped in perception; familiarity with an object facilitates the establishing of a figure-ground pattern. (Related to this law is the Gestaltists' view of memory as the persistence of traces in the brain that allows a carryover from previous to present experiences. They view these traces not as static, but as modified by a continual process of integration and organization.)

#### **3. The law of Closure**

Learners try to achieve a satisfying final state of equilibrium; incomplete shapes, missing parts, and gaps in information are filled in by the perceiver.

#### **4. The law of Continuation**

Organization in perception tends to occur in such a manner that a straight line appears to continue as a straight line, a part circle as a circle, and a three-sided square as a complete square. Gestalt psychology is classified by most interpreters as within the family of field theories, which are theories that propose that the total pattern or field of forces, stimuli, or events determine learning.

### **CONCLUSION**

This paper concludes that the Lifelong learning is more than training or continuing education. It must support multiple learning opportunities including exploring conceptual understanding as well as narrowing to practical application of knowledge, ranging over different settings such as academic education, informal lifelong learning, and professional and industrial training. In this way, there are a variety of approaches to professional development, including consultation, coaching, communities of practice, lesson study, mentoring, reflective

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supervision and technical assistance. And also, mostly influenced the lifelong learning are internships and apprenticeships, vocational courses, teaching yourself a new language, studying a new subject, learning to use new pieces of technology and playing a new game or sport. The learner gaining knowledge and learned behaviours from our environment. However, this is by no means an extensive list – and any attempts to actively build our skills will generally fall under the category of lifelong learning.

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**HOW SOCIAL MEDIA CAN BE A GOOD WORD OF MOUTH FOR SMALL BUSINESSES IN INDIA?**

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**ABSTRACT**

*The use of social media ranges from personal to business purposes. Social Media, today, is among the 'best opportunities available' in a brand for connecting with prospective consumers. Social media is the medium to socialize. These new media win the trust of consumers by connecting with them at a deeper level. But still in our country so many small businesses do not have a website and they don't even know anything about the social media platform. A survey was done by GoDaddy and the survey reveals that as many as 63 percent of India's small businesses don't have their own website, with 40 percent stating that their company is just too small to warrant a website. In recent years' social media has proved to be the best platform where businesses get a new height. But still our business people don't know about this. "Word of Mouth" is the most important thing in every business and if you don't have a good word of mouth your business is gone. The biggest challenge that businesses face in their business is the bad word of mouth, Consumer trust issues related to new brands and the lack of publicity. This paper explains how social media can become a very good word of mouth for small businesses in our country. Small businesses face a lot of problems due to lack of knowledge about the brand. Most people in our society have a motto "paise de rhe ho to achi cheez pe do" (if you are giving money, then buy that product only, which has a good brand name). It also tries to do the analysis of the small businesses which used the social media in their businesses and those have not used it in their business; to find out an outcome for their problems. It also discusses the development and advantages of social media in small businesses in India as well as other countries.*

*Keywords: Social Media, Social Media Promotion, Word of Mouth, Psychology, Small Businesses*

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**INTRODUCTION**

In today's world social media is a big influencer. We see thousands of post every day in social media. SM is engaging with customers online on daily basis. The blast of social media trend is as amazing as that and the speed at which it is improving is frustrating. Trust and goodwill are the basis of social media, and by promotion in the realm of social media these fundamental notions need to be adhered. It is probably the only promotion system that motivates certified interaction and accountability among sellers as well as customers. International companies have identified Community Press Marketing as a potential promotion system, used them with enhancements to power their marketing with social media promotion.

Social media uses the "wisdom of crowds" to connect details in a mutual manner. Community social networking can take many different forms, such as Internet forums, forums, weblogs, podcasts, wikis, pictures, and video clip. Social media is created up of user driven websites that are usually centered on a specific topic or feature. Social media is the method to interact socially. They use web based technology to quickly disseminate information and details to a wide array of customers. They allow development and return of user generated material. Facebook, Tweets, Hi5, Orkut, Whatsapp and other social media platforms are collectively referred social media. Social media symbolizes low-cost resources that are used to combine technology and social connections with the use of terms. These power resources are typically online or mobile centered. There are many advantages of social media but the most important advantages are: cost decrease by decreasing staff time; increase of probability of revenue creation. Social media allows companies to Share their skills and information, tap into the wisdom of their customers, enables clients helping clients, engages leads through client evangelism. Through social media anything can get famous.

**REVIEW OF LITERATURE**

We are living in 2018 and social media has been one of the most important factor in our live but still many of our small businesses doesn't have a website, they don't know how to promote their businesses through SM medium.

A survey was done by Godaddy and Redshift. Rajiv Sodhi, GoDaddy said 3 major challenges of SMBs in India are - access, awareness and adoption. Out of 51 million SMBs in India, only 500,000 have websites according to advisory firm Zinnov, this gives **GoDaddy** enough reasons to empower a large audience who lack awareness and are bitten by the syndrome—Do-it-for-me (DIFM), unlike in western consumers who are in Do-It-Yourself (DIY) mode. Without calling 'Flipkarts of the world' as direct competitors, GoDaddy, the online technology provider is taking India region as bedrock for its overseas expansion.

{Source: Rajiv Sodhi, Godaddy - ET Retail -Batra, A. (2015, August 25)}

Gümüş & Kütahyalı (2017) [2] indicate that social media provide serious opportunities for SMEs in terms of sales and cost advantages, as well as communication and sharing advantages.

Anas A. Al Bakri (2017) [1] indicated that there are no significant relationships between social media use and competitive advantage. Only 10% of the SMEs were using social media. Of these, 72% used Facebook, 27% Twitter and 1% YouTube. All said social media had improved customer service and relationships, and 80% said it had improved products and service. Uncertainty in how to apply social media, measure the return on investment and persuade employees to embrace social media was the main challenges

Malik Shahzad Shabbir and Muhammad Saarim Ghazi etc., (2016) [3] concluded that there is a positive impact of social media applications on small business entrepreneurs as well as they are highly motivated to use this platform.

**RESEARCH OBJECTIVE**

This paper clarifies how web-based social networking can turn into a decent verbal exchange for small business in our nation. Small business confronts a considerable measure of issues because of absence of information about their brand to consumer. A great many people in our general public have an adage "paise de rhe ho to achi cheez pe do"(if you are giving cash, at that point purchase that item just, which has a decent brand name). Many small businesses don't know how to promote their business through SM medium. Are main objective being to check how social media can help the small businesses to promote their business. How can small businesses create a good image of their product in the mind of consumer with the help of SM medium?

A study was done by GoDaddy and the study uncovers that upwards of 63 percent of India's small businesses don't have their own site, with 40 percent expressing that their organization is simply too little to warrant a site. In recent online life has ended up being the best stage where organizations get tallness. Yet at the same time our businessmen don't think about this. "Word of Mouth" is the most essential thing in each business and on the off chance that you don't have a decent Word of mouth your business is no more. The biggest challenge that small businesses faced is the bad word of mouth and the lack knowledge about their brand to consumer.

**RESEARCH METHODOLOGY**

The study is based on secondary source of data collection. Data were collected from various magazine, article, reviewed books, newspaper, and social media reports.

**Small businesses**

Definitions of Micro, Small & Medium Enterprises in accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified in two Classes:

**1. Manufacturing Enterprises-**The ventures occupied with the make or creation of merchandise relating to any industry indicated in the principal timetable to the businesses (Development and direction) Act, 1951) or utilizing plant and apparatus during the time spent esteem expansion to the last item having an unmistakable name or character or utilize. The Manufacturing Enterprise is characterized as far as interest in Plant and Machinery.

**2. Service Enterprises-** The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment. The limit for investment in plant and machinery / equipment for manufacturing / service enterprises.

<b>Manufacturing Sector</b>	
<i>Enterprises</i>	<i>Investment in plant &amp; machinery</i>
Micro Enterprises	Does not exceed twenty-five lakh rupees
Small Enterprises	More than twenty-five lakh rupees but does not exceed five crore rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees
<b>Service Sector</b>	
<i>Enterprises</i>	<i>Investment in equipments</i>
Micro Enterprises	Does not exceed ten lakh rupees
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than two crore rupees but does not exceed five core rupees

Source: Lakshmi.V, A. M. (2017).IJS DR, 71.

**KINDS OF MICRO AND SMALL HOME-BASED ORGANIZATIONS**

A locally established business is an endeavor in which all or the vast majority of the work is performed at or from the proprietor administrator's private living arrangement. Locally established business is one of the quickest developing areas in the economy. Basic organizations that are worked from home are exchange organizations, where general managerial undertakings are done at home, with work being finished at different locales. Precedents incorporate painters, handymen and circuit testers. Numerous miniaturized scale organizations are family worked. Relatives will by and large have responsibility for business and assume a noteworthy job in its everyday activities. Some openly recorded organizations and establishments began from the modest beginnings of a family-worked business. Some regular models of privately-run companies incorporate cake shops, eateries, bistro, flower vendors, architects, photography et cetera. Self-employed entities maintain their very own business, and contract out their opportunity to organizations and different associations as an administration. Their privileges and commitments contrast from a representative from various perspectives. They claim our very own business and by and large will have the capacity to arrange expenses and working game plans. A few models of self-employed entities are developers, food providers and fitness coaches.

**IMPACT OF SOCIAL MEDIA**

Social media has impacted world and business. There is a progressive change in the manner in which individuals connect and convey, Ali Kinston Mwila, Mining Information Innovation at Barrick Gold Corporation says Social systems help the organizations in an assortment of ways. Customary promoting mediums, for example, the radio, TV ads and print advertisements are totally out of date now and interest for a huge number of money. Notwithstanding, with online networking the organizations can associate with their focused on clients for nothing, the main expense is energy and time. Through Facebook, Twitter, LinkedIn or some other social site you can bring down your showcasing cost to a huge level. He additionally specified in his article 'Positive and Negative Effects of Social Media on Society', Oct 2015 that long range informal communication locales are to join individuals on a colossal stage for the accomplishment of some particular target. This is imperative to get the positive change society.

Presently, small businesses utilize grouping of uses in online life to improve their business development and in addition for exposure. As, expansive number of related field join their pages that is the reason they gain increasingly and share learning with each other's, results in development of their organizations. With the section of time, no uncertainty in it that innovation is getting to be quicker and quicker and in addition making lives of people less demanding, then again the pioneers exploiting this office and bringing new thoughts on the aspects. Business visionary will utilize the Facebook to associate with its frail binds or attempt to increment contact with existing solid ties. Independent venture utilizes online networking more since it is tied in with mingling and imparting insights. These suppositions can be communicated/composed passages as blog entries or remarks, video introductions and votes via web-based networking media destinations. These feelings are immediate and unfiltered Shabbir. The transparency of these feelings is one of the primary changes web based life acquainted with the connection among business and clients Some entrepreneurs uses social media for their businesses but their many who still are not using this platform.

Through social media they can build quickly network of supporters which is vital for business growth. Since these supporters continue bring customers/business for little business people by eluding it to other people. Online networking makes a long haul connection between organizations and clients.

**But there are some issues related to social media that worries the small and medium businesses**

1. The implementation of social media is the lack of consensus on how to implement different activities as the platforms and the technologies are so dynamic and there has not been a clear guideline for businesses as to how to utilize them. Mostly business use their own experimental approach to achieve a better result and this has somehow made the task more challenging.
2. There are many small and medium businesses which join social media but those who maintain their online presence effectively are relatively low, this is because many who join social media are without a clear goal.

Gillin explains probably most businesses want to experiment the technology or maybe they are attracted by the low cost of entry and he suggests experimenting is better than inaction, but better to have a plan. Tuten suggests if a business is to benefit from social media marketing, the first step in the process should be to set objectives for the campaign, as setting objective is a critical step in any communication and marketing planning process. According to him, any marketing campaign without an objective cannot be measured and evaluated and unless we are able to measure the performance it can be considered a waste of an effort.

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**BENEFITS OF SOCIAL MEDIA FOR SMALL / MEDIUM BUSINESSES**

Scale Business or a start-up can benefit from social media in diverse ways, which can include the following: an increase in its ROI, Customers and many more [5,6,7].

**a. Productivity Benefits:** At the point when organizations start to utilize web based life as a showcasing device by building a solid noticeable computerized/online nearness, these organizations tend to pick up as far as profitability since they can reach to a more extensive market on the Internet. This over the long haul achieves an expansion in the business" ROI.

**b. Increase in Customers/Clientele:** Organizations can build their number of potential clients when they utilize online life. For instance, when one customer or client hits the like catch of your company's page on say Facebook, it is seen on her divider and in the entirety of her companions' channels which can interest another companion who may most likely be not a client to tap on the connection to your page to perceive any reason why his/her companion loved your page and this won't simply bring you adherents however potential clients too.

**c. Wider Knowledge Pool:** According to KPMG International publication on Going Social: How Businesses are making the most out of social media, 88.8% of experienced managers believed that social media increased their companies' knowledge pool.

**d. Cost Savings & Insights:** The use of social media can eliminate months of slow and expensive production by getting real-time data and feedback and being able to adjust quickly multiple campaigns to make the highest impact where possible. Also the social media platform will provide the insight you need to know about buyers" dynamics and motivations, which can be used to refine and tailor your content to launch rich campaigns.

**SOCIAL MEDIA: A GOOD WAY OF WORD OF MOUTH**

Social media in changing the traditional approach of promoting things. In early days, we could come to know about different product only with the help of TV, radio and newspapers. But now we have a place where we are aware of everything and know what's going on in the market. But still many SMBs are not using it. By using social media platform SMBs will have a consumer trust support.

- a) Consumer will now know about the company.
- b) SMBs businesses will have their own brand image in the market because consumer will have a good perception about them.
- c) Consumer will spread a good word of mouth about the product.
- d) SMBs will have a good knowledge about the new technology.

When the SMBs will have a good word mouth then their product value will be increased. We as a consumer have a behavior that buy that thing which gives you satisfaction but buy that product after doing a market search. And we know how consumer do market search by asking their relatives and doing an online search. Here the online search part will be covered.

**SOCIAL MEDIA ALLOWS BUSINESSES TO CROWD-SOURCE IDEAS**

Before you launch a new product or service, one might want to have a few thoughts regarding what individuals think about it. So by engaging with prospects and clients through social media, one can really ask the fans and devotees what colors they lean toward or on the other hand what sorts of highlights they need. In this way one can include purchasers in significant free statistical surveying, by asking their assessments and can help build up believability by demonstrating that their feelings matter. In the wake of seeing their thoughts turning into a reality, business has more than likely simply expanded their client base.

**SOCIAL MEDIA ALLOWS KEEPING AN EYE ON COMPETITION**

Organizations are changing marketing strategies in light of data they find in online networking sustains from their competitors. By watching out for competitors, their qualities what's more, shortcomings can decide their promoting endeavors. This assembled data executes things that may be expected to enhance, for example, web based life crusades, challenges, giveaways or kinds of substance the supporters might be reacting to the most. Web based life Allows Business to Be More Transparent. The way toward taking a prospect to the point of turning into a client has backed off to some degree because of purchasers' mindfulness. Individuals need to purchase from those organizations who have set up validity and who appear to be completely straightforward in their promoting efforts. Internet based life is changing people groups' feelings of organizations. Through the help social media one will know how its competitor brand is launching and how different they can launch that product.

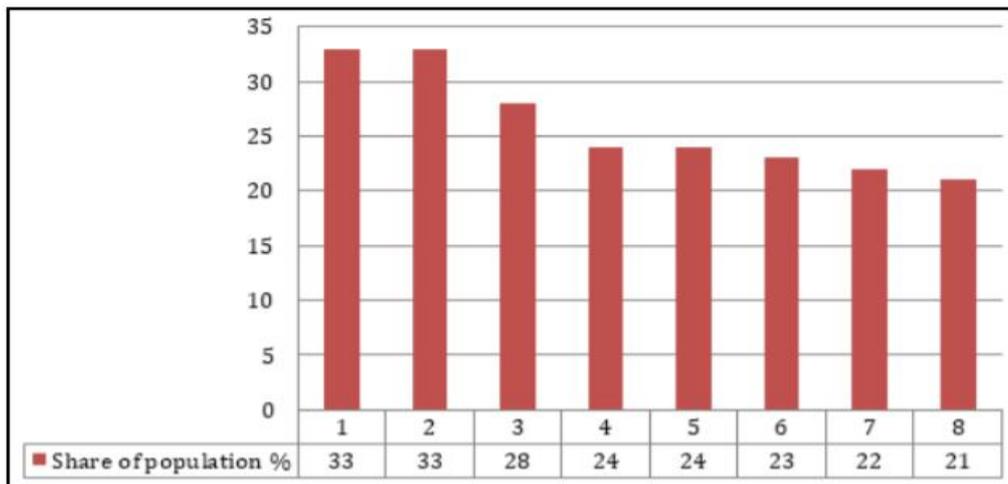
By providing messages that are open, transparent and helpful, social audiences will learn that your business cares about its customers and potential customers. One can position their company as a valuable resource by simply sharing information like advice, tips, or just answering questions about the industry.

**Table-1: Number of social media users in India from 2015 to 2022 (in millions).**

Years	No of users in millions
2015	142.23
2016	168.1
2017	196.02
2018	226.06
2019	258.27
2020	292.43
2021	336.18
2022	370.77

Source: www.statista.com

The above table shows that number of social network users in India from 2015 to 2022. In 2019, it is predictable that there will be around 258.27 million social network users in India, up from close to 168 million in 2016. The most fashionable social networks in India were You Tube and Facebook, followed by social app WhatsApp. Facebook is predictable to reach close to 319 million users in India by 2021.



**Fig 1**

Source: International Journal of Commerce and Management Research

**GoDaddy and Redshift**

A survey was done by GoDaddy and Redshift that how many SMBs have their website and how many of them don't have their web site. In this survey they came to know that there are 63% don't have a website, 76% of these plan to have one in the next two years, reveals a survey by GoDaddy and Redshift Research.

*SOURCE: The survey was conducted by Redshift Research and GoDaddy among 500 very small businesses in India, and 4,009 units in Australia, Brazil, Canada, India, Turkey, United Kingdom and United States in June-July 2015. All responses may not add up to 100 due to multiple choices.*

**DATA ANALYSIS**

**Table-1: Barriers for creating a website for business**

% of respondents	Response
40%	I think my business is too small to warrant a website
19%	It is beyond my technical expertise
17%	My social media presence/business directory listing has met my requirements
17%	I couldn't afford it
17%	I don't think it would help my business

Most of the respondents think that their business is not very big so they don't use the website.

**Table-2: Future Plan to get a website**

% of respondents	Response
34%	Current year
24%	Within the next two years
18%	Already working on it
14%	Not sure
10%	Not planning in the future

Most of the respondents confirmed the development of website for their business.

**Table-3: Plan to sell goods through website**

% of respondents	Response
32%	My website will have online store/ e-commerce functionality on launch
19%	My website will have online store/ e-commerce functionality within a year of launch
26%	My website should have online store/ e-commerce functionality, but am unsure when it will be available
23%	I don't plan to have online store/ e-commerce functionality

Most of the respondents assured the selling of the goods through the website.

**Table-4: Impact of website on the business/ sales growth in next 3-5 years**

% of respondents	Response
19%	It will make a huge difference, perhaps as much as 50% growth
35%	It will help a lot, perhaps as much as 25% growth
33%	It will help a bit, perhaps as much as 10% growth
8%	It will not have much impact on growth

Most of the respondents think that the website will help for the sales growth in their business.

**Table-5: Website for online presence of the business**

% of respondents	Response
37%	I have a website
18%	I don't have a website or any online presence
23%	I plan to build a website for my business soon
22%	I have a Facebook page or mobile app
3%	I have a store on sites like eBay, Amazon
9%	My business is on a business directory listing websites

Most of the respondents have website for their business.

**Table-6: After the creation of website, Impact on business growth in two years**

% of respondents	Response
30%	My business grew significantly, by more than 10%
20%	My business size remained the same
33%	My business grew a bit, by up to 10%
12%	My business shrank

Most of the respondents confirmed a very minute growth in the business.

**Table-7: Importance of mobile friendly business website**

% of respondents	Response
58%	Very important
33%	Somewhat important
5%	Not very important
2%	Not important at all

Most of the respondents agreed that the mobile friendly website is very important and helps for the growth of business.

**Table-8: Devices having most of the traffic to the business website**

% of respondents	Response
27%	Mobile device users (including smart phones, tablets)
39%	Desktop device users (including laptops)
28%	An even mix of mobile device users and desktop device users
7%	Not sure

Most of the respondents think that desktops/laptops are very popular for accessing the business websites.

**Table-9: Tools to reach new markets and improve customer relations**

% of respondents	Response
63%	Social media presence
62%	Search engine optimization
34%	Customer relationship management tools
22%	Analytics
5%	Not sure

Most of the respondents prefer social media presence and search engine optimization tools to reach new markets and to improve customer relations.

### RECOMMENDATION AND CONCLUSION

In recent era world Social media applications become most resourceful efficient tool for small and medium business entrepreneurs and normally all small business use social media platform for the advertising and hype of their product and they make enthusiast pages for the followers and they warmly welcome the suggestions and opinions which help in civilizing the business. Based on theories it is clear that if small businesses social media tools with right approach and obvious goals they can easily reach to their target customers and by using in right approach social media helps to build a long term relationship with customer and businesses. Social media provides an occasion to both business entrepreneurs and consumers to communicate effectively. Social media can help small businesses to spread out their businesses by using large range of weak ties but there are some issues with social media which is faced by the small business such as technologies are so energetic and has not been a clear guideline for businesses as to how to exploit them and they launch social media campaign without clear strategic goals. So as per my observation by reading the literature review, social media applications have positive impact on small and medium business entrepreneurs are extremely motivated to use this platform because it requires minimum budget or even free in most social media websites to advertise their products and social media creates an interaction and customer perception is inclusive and participatory and social media provides factual time feedback handling opportunities. When SMBs will use this platform consumer will know about their product and will have a good perception in mind towards that company.

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**ANALYSIS OF LEARNING ORGANIZATION DIMENSIONS IN AUTOMOBILE INDUSTRY IN INDIA: AN ATTITUDINAL STUDY OF MANAGERIAL CADRE EMPLOYEES**

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**ABSTRACT**

*Learning organization concept flourished in 1990's and gained momentum in the 21<sup>st</sup> century. It has become an important aspect of every organization to create, capture, transfer, and mobilize knowledge before it can be used. Learning is inevitable to get success, to survive in the competitive world and to maintain business sustainability, both for an individual as well for the organization. The current paper focuses on the importance of various aspects/dimensions of learning organization in the automobile sector, which is high manufacturing sector in India, as the demand for vehicles is increasing continuously. Hence, the automobile sector becomes the focus to study the concept of learning organization and its dimensions.*

*Aim: The main aim of the research paper is to find out the most popular aspects of learning organization, to find out the most prominent dimensions of learning organization, and to understand the variations of results in the learning organization aspects/dimensions due to age factor.*

*Materials and Methods: The population for the study is heterogeneous and covers middle level employees of automobile sector. Data are collected from 513 sampled respondents which differ in age, designation and departments. To test the result, Non- Parametric tests like Sign Test, Chi-square Test, Wilcoxon Matched Paired Test (Signed Rank Test), were applied at 5% percent level of significance.*

*Result & Conclusion: The results indicate that all the seven dimensions including 21 aspects of the learning organization are very vital and equally important irrespective of the age groups of the managerial cadre employees to build a learning organization. However, in terms of the seven dimensions of the learning organization, viz., create a continuous learning opportunity, promote inquiry and dialogue, encourage collaboration and team building, create systems to capture and share learning, empower people towards a collective vision, connect the organization to its environment and provide strategic leadership for learning, their impact increases the learning with the advancement of the age of the employees.*

*Keywords: Learning Organization, Dimensions, Leadership, Empower People, Collaboration, Team Building, Sustainability*

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**INTRODUCTION**

Learning is important for the organization as well as for the employees to get success in the future. Learning organization refers here two terms, viz., individual learning and organizational learning. Individual learning promotes organizational learning, for they are complementary to each other. Main purpose of the learning organization in today's environment is to make the organization capable to identify new ideas, problems and opportunities for performing which help the organization in gaining competitive advantage and survival in the long-run. Change is continuous process which makes organization strategies and methods outdated, and to cope up with the issue of change, organizations need to set their organization structure flexible, so that they can adapt the technology for survival of the organizations.

Every organization sets their own learning level according to ability of their employees and capability of the organization. In the past various sectors have covered in the research of learning organization. In this study, the main focus is given on the manufacturing sector, for the manufacturing sector is the most growing sector in today's scenario and due to continuous changing environment this sector faces a challenge to improve the whole production process according to time and requirement of the customer as well as of the market and society. In manufacturing sector, the automobile segment gains a lot of focus because of its high diversity and demands of vehicles in the market. Technology and demands are continuously changing which are critical issues for the automobile sector. To face this issue, the automobile industry needs to be learnt fast and change itself according to the environment. Learning of the organization affected by various factors but the main dimensions of the learning organization are the main elements which help building the learning organization. Attention of the learning organization dimensions is necessary because automobile sector is a sector which requires more technologies and is characterized as learning organization, where learning is continuously required due to utmost technology updation.

Learning is a process of adding in the existing knowledge and to adapt the new skills and behavior. Learning organization term coined by Peter M. Senge (1990). Marquardt (1996) defined learning organization as one

which learns powerfully and collectively and in continuously transforming itself to better collect, manage and use knowledge for corporate success. Basically, learning organization is capable to learn new things and adapts the change. Learning organization concept is growing in today’s environment because of the continuously changing scenario of business world, when an organization wants to survive in the long run and need to adapt the change as soon as possible. Watkins & Marsick (1993) defined learning organization is one that learns continuously and transforms itself. Learning takes place in individuals, teams, organizations and even the communities even with which the organizations interact. Learning results in change in knowledge, beliefs and behaviors. Learning also enhances organizational capacity for innovation and growth.

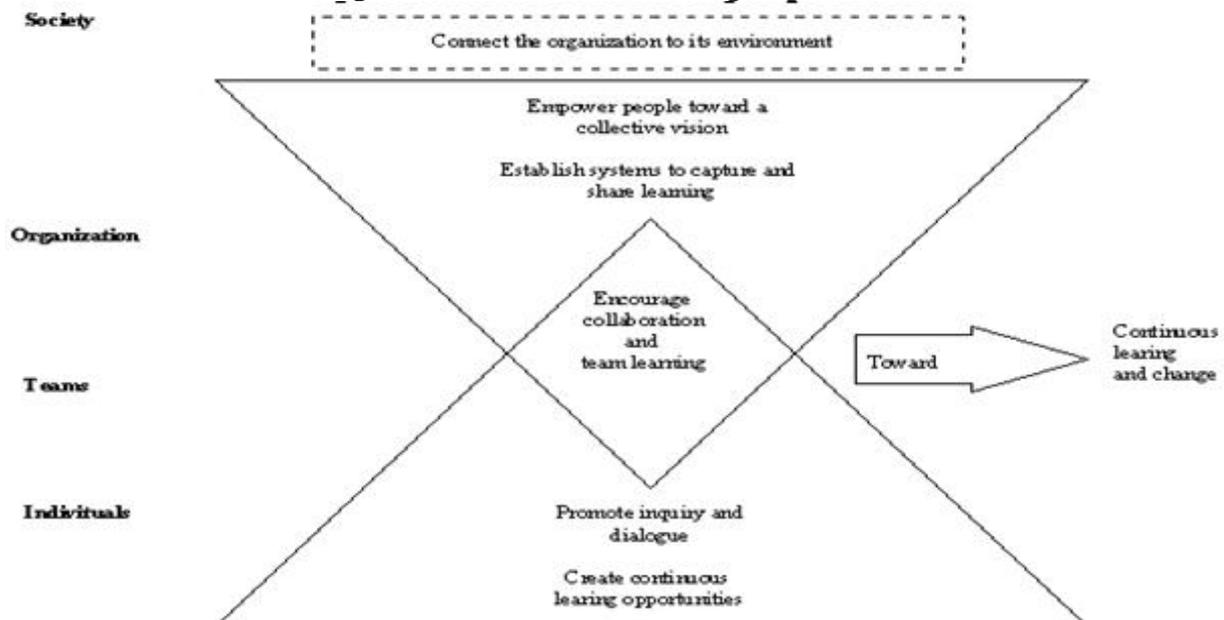
Antonoaie & Antonoaie (2010), said that learning organization is a glamorize vision of an organization; learning organization keeps open every part of the organization to adapt the changes and to improve the existing techniques or structure. All employees are involved in continuous learning and management laid the norms and value which supports the continuous learning. Learning organization is a platform where employees and group of employees share their knowledge, and use resources and experiences to achieve a common goal of an organization. Learning organization is also known as a process of developing thinking, Melhem(2011). Kassim &Nor (2017), assures that senior level librarians have positive attitude towards the learning organization practices as compare to middle level librarians. In universities learning organization practices are exit to make education sector more effective.

Lazar & Robu (2015), states that a learning organization can discover current and standard performance gap, find out the main causes and then make strategy to implement improved working methods and techniques. Little & Swayze (2015), said that learning dimensions increase the variables of organizations’ outcomes. Learning organization can create an environment which helps in continuously encouraging hopes, competence and flexibility within the culture of organization; and have a positive impact on the organizational performance.

Antoaneta &Ileana (2008), indicates that learning organization can be created through two keys, viz., people and technology. Knowledge management sets the platform from which learning organization can be developed. Goh (2001), found that learning organization increases the commitment towards the organization within the employees, who take part in each and every activity of the organization and also take responsibilities of their own work. Dekoulou & Trivellas (2015), in their study revealed that if organization implements learning organization within the organization environment, it will lead to improve job satisfaction and employees performance; and he also lays down that learning organization is connected positively with the good performance. Laeeque *et al.*, (2017), states that learning organization has highly correlated with knowledge creation, and knowledge creation work as mediator to link learning organization with innovation performance.

According to Marsick & Watkins (1996), the prominent and well accepted dimensions of learning organization are divided into four levels: Individual, Teams, Organization and society, as depicted in Figure 1. The dimensions of learning organization and their inter-linkages are not far to seek.

**Figure-1: Dimension of Learning Organization**



Source: Watkins & Marsick. (1993) model of dimensions of learning organization

- i. **Create Continuous Opportunities:** Learning model is implemented in the organization so that employees can learn during the work on their jobs. Learning provides and creates opportunities for continuous growth and career development. It improves the methods of working and helps organizations to achieve the goal and objectives through new updated technology. Learning is continual and a focus of each organization. Learning help organization to raise the level of problems and remove the obstacles of past problems, Batenson(1972); Kim(1993); McHugh et al.(1988); Senge(1990); Yeo(2002). Learning in an organization requires at all levels, individual level learning promotes learning to the organizational level. According to Argyris (1996),the individuals learning activities, in turn, is facilitated or inhibited by an ecological system of factors that may be called an organizational learning system. To develop learning in the organization it is necessary to find out the strategies to use the capability and experiences of an individual to promote the continuous learning environment in the organization, Easterby-Smith et al.(1999); Parthasarthy & Sethi, (1992).
- ii. **Promote Inquiry and Dialogue:** Employees are benefited with new skills, got confidence to express their ideas and build an ability to listen other views. This culture promotes inquiry, questioning, experimentation and feedback. Inquiry and dialogue increase the level of awareness among peoples and promote them to ask the question which improves the mental models. Learning is developed in the organization at higher levels where inquiry and dialogue are promoted with an open environment, Senge(1990). Dialogue create an opportunity for open communication within an organization which helps in increasing the level of learning, Elinor & Gerard(1998).
- iii. **Encourage Collaboration and Team Learning:** Work is assigned in that manner which interlinks the groups and teams, so that group thinking can be developed, and can lead to collaboration within the organization. Team and groups are rewarded for the best performance, which motivates employees to work within the groups. Watkins & Marsick (1993) found that sharing and teamwork are the factors of success for the organization. Teams allow members to explore new ideas and new perception to learn new technology, Redding(1997). Team performance increases the collaboration within the organization. Teamwork supported by the individual as well as by the organization which builds the sense of unity among the employees, Argyris(1994).
- iv. **Establish Systems to Capture and Share Learning:** Low and high technology environment and system are developed to share learning and to connect that system with work, so that information is available at all the time when it is required. System is updated at regular intervals to capture and share knowledge.
- v. **Empower People Toward a Collective Vision:** Organization's people take a part in setting and implementing a collective vision. They have opportunities to share their views about the vision. Organization delegates responsibility and authority to take decision which motivates the employees to learn more on what they need to do and to build a sense of accountability among them. Burns (1978), state learning as a process in which one or more people engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. Leadership influence the employee which empower the employees. Leaders play a role in empowerment and remove the inequalities and promote independence, equality for all the members, which increase the empowerment, Bass(1985) & (1998); Bennis & Nanus (1985). According to Buckler (1996), leader and individuals work together and support each other and achieve the collective vision which also creates a sense of empowerment.
- vi. **Connect the Organization to its Environment:** Employees are encouraged to see the impact of their outcomes and activities on the society and enterprise. They scan the whole environment and use the report of scanned environment to improve their work and help in connecting the organization and society. An organization is connected with the boundaries and community with the help of scanning process. The information is collected from the each and every part of an environment and used by the learner to develop learning organization and to achieve the collective goals, Bass (1998); Watkins & Marsick, (1993) &(1999). In this rapid globalized environment, organization must learn to think of themselves as one company with one workforce and a shared market environment, Marsick& Watkins(1999).
- vii. **Provide Strategic Leadership for Learning:** Creating a learning organization is difficult without a supportive and motivated leadership within the organization. Every organization has leadership which helps people in learning. The leaders support the learning culture and make strategy to implement learning in the organization. Leadership is used strategically to develop the model and to provide support for learning. Leaders help people to create a collective vision toward which the entire organization can work in a learning organization, Watkins & Marsick(1993).

In view of the aforementioned background, the researcher became curious to know the empirical response of the attitudes of the employees towards the dimensions of learning organization. Moreover, no study has been undertaken for the employees of automobile sector. Hence, the researcher has picked up the problem for the study as spelt as, "Analysis of Learning Organization Dimensions in Automobile Industry in India: An Attitudinal Study of Managerial Cadre Employees" with an aim to find out the most popular aspects of learning organization, to find out the most prominent dimensions of learning organization, and to understand the variations of results in the learning organization aspects/dimensions due to age factor.

### MATERIAL AND METHODS

**To carry out this study, the researchers have followed the research methodology as briefly outlined below:**

The title of the problem is, "Analysis of Learning Organization in Automobile Industry in India: An Attitudinal Study of Managerial Cadre Employees". The focus of the study is the attitudes of the managerial cadre employees, for their attitudes can really disclose the invisible aspects of the dimensions. The population of the study covers all the managerial cadre employees of automobile sector in Delhi NCR region. Such employees are very large and heterogeneous in terms of age, education, experience and status. Hence, the researcher has adopted sampling study. The scope covers learning aspects and dimensions of learning organization. Moreover, it is limited to the managerial cadre employees in the Delhi-NCR region of the automobile sector; and deliberately focused the age factor among the other heterogeneity elements. This is because age is believed to have vital impact on the dimensions of the learning organizations. The nature of the study is descriptive-cum-exploratory, for all the employee of the automobile sector in India has not been covered up. Its results may be used as main hypotheses for large scale study by others.

**The hypotheses of the study therefore is**

- i. All the aspects of learning organizations are equally vital and popular.
- ii. All the dimensions of learning organizations are equally prominent.
- iii. There is significant impact of age on the average score values of measurement of the attitudes for learning organization aspects/dimensions.

The study is based on primary data collected from the middle level employees of the automobile manufacturing sector in Delhi-NCR Region. A detailed questionnaire is used to collect the data. The dimensions of the learning organization questionnaire (DLOQ) developed by Marsick and Watkins (2003) consists of 56 questions which covered all the dimensions of learning organization. Laeque *et al.*, (2017) used DLOQ in their study for linking the learning organization practices with knowledge creation. Chermack *et al.*, (2006) considered the dimensions of learning organization in their research to explore the relationship between panning and perception about learning organization practices. Further, Yang (2004) developed a shorter form of DLOQ with 21 items. Further DLOQ with 21 items used as instrument by Meon & Federici (2011; 2012). This study used the shorter form of the DLOQ to collect the information. The Questionnaire is based on 5-point Likert scale where point-1 stands for the strongly disagree to point-5 for strongly agree. All the 21 items (aspects) are broadly grouped into seven parameters (dimensions) of learning organization, viz., (i) create continuous learning opportunities, (ii) promote inquiry and dialogue, (iii) encourage collaboration and team learning, (iv) create systems to capture and share learning, (v) empower people towards a collective vision, (vi) connect the organization to its environment and (vii) provide strategic leadership for learning.

For want of exact sampling frame and assuming the population very large, the researcher has decided the sample size 513 employees which is based on researcher's intuition and judicious understanding to represent all the employees in their age-group. The sample contains broadly two categories of employees; viz., 20-35 years and above 35 years of age. The first category includes 411 employees while the second category 102 employees. The 513 samples employees have been identified by using random sampling technique so that the sample may represent the whole population. However, considering the situation practically infinite, the following formula has been used to know the minimum size of the sample

$n = Z^2 \sigma^2 / e^2$ ,  $n = (1.96)^2 \times (0.67)^2 / (.058)^2 = 512.6$ , hence, 513 was taken as size of the sample at 5% level of significance.

By administering the structured questionnaire containing 21 scaling questions based on 5-point likert scale, the data were collected from the sampled respondents.

The sampled middle level managers have been identified by using a stratified random sampling technique so that sample represents the whole population. To check the result and to test the hypotheses, non-parametric tests like Sign Test, Chi-square Test, Wilcoxon Matched Paired Test (Signed Rank Test), were applied at 5% percent level of significance.

**RESULTS AND DISCUSSION**

The data collected in this empirical study relates to 513 middle level managers which have been processed as shown in table-1.

Learning organizations dimension are affected by many things, but in this study efforts were made to find out only the impact of age factor by calculating the score values. For calculating the score values, the sampled employees were grouped into two categories, i. 20-35 and ii above 35 years of age. The details of the score values are as per table-1.

**Table-1: Average scores of Attitude Measurement on 5-point scale for the aspects and parameters/dimensions of learning organization of the sampled respondents**

S. No.	Dimensions of Learning Organization	Aspects of Learning Organization Pertaining to each Dimension	Up-to 35 years of Age (411) Group (a)		Above 35 Years of Age (102) Group (b)		All the Respondents (513)	
I	Create a Continuous learning opportunities	1. In my organization people help each other learn	3.51	3.73	3.55	3.84	3.52	3.76
		2. In my organization, people are given time to support learning	3.95		4.09		3.98	
		3. In my organization, people are rewarded for learning	3.74		3.90		3.78	
II	Promote inquiry and dialogue	4. In my organization, people give open and honest feedback to each other	3.90	3.84	4.07	4.01	3.93	3.87
		5. In my organization, whenever people state their view, they also ask what others think	3.76		3.87		3.78	
		6. In my organization, people spend time building trust with each other	3.87		4.09		3.91	
III	Encourage Collaboration and team learning	7. In my organization, teams/groups have the freedom to adapt their goals as needed	3.91	3.87	4.04	3.97	3.94	3.89
		8. In my organization, teams/groups revise their thinking as a result of group discussions or information collected	3.88		4.04		3.91	
		9. In my organization, teams/groups are confident that the organization will act on their recommendations	3.84		3.83		3.84	
IV	Create systems to capture and share learning	10. My organization creates systems to measure gaps between current and expected performance	3.94	3.82	4.06	3.91	3.97	3.84
		11. My organization makes its lessons learned available to all employees	3.54		3.52		3.53	
		12. My organization measures the results of the time and resources spent on training	4.00		4.15		4.03	
V	Empower people towards a collective vision	13. My organization recognizes people for taking initiative	3.81	3.91	3.83	4.01	3.81	3.93
		14. My organization gives people control over the resources they need to accomplish their work	4.09		4.27		4.12	
		15. My organization supports employees who take calculated risks	3.83		3.95		3.86	
VI	Connect the organization to its environment	16. My organization encourages people to think from a global perspective	4.00	3.95	4.16	4.06	4.03	3.97
		17. My organization works together with the outside community to meet mutual needs	3.88		3.92		3.89	
		18. My organization encourages people to get answers from across the organization when solving problems	3.99		4.10		4.01	
VII	Provide Strategic leadership for learning	19. In my organization, leaders mentor and coach those they lead	3.95	3.99	3.96	3.98	3.95	3.98
		20. In my organization, leaders continually look for opportunities to learn	4.04		4.10		4.05	
		21. In my organization, leaders ensure that the organization's actions are consistent with its values	3.99		3.88		3.96	
	Overall Average		3.87	3.97	3.89			

(Source: Based on Survey data)

The overall score value of all the aspects and dimensions on a 5-point scale is 3.89 which accounts for more than 78% of the total spectrum and thus indicates vital importance of all the aspects of learning organization. To find out whether all the aspects of learning organization are equally important or different for all the respondents, Sign Test and Chi-Square test were applied

### (i) Sign Test

Null Hypothesis  $H_0: \mu = 3.89$ , Alternate Hypothesis  $H_a \neq 3.89$ ,

Total Number of Signs (n) = 20: 13 plus sign and 7 minus sign,

Number of less frequent signs (s) = 7

Critical value for two-tailed test at 5% level of significance (k)

$$K = (n-1)/2 - 0.98 \sqrt{n}, = 19/2 - 0.98 \sqrt{20}, = 9.5 - 4.38 = 4.12$$

Since S (7) > K (4.12), Null hypothesis is accepted

As null hypothesis is accepted; thereby all the aspects of the learning organization are equally important as per the one sample sign test.

### (ii) Chi-Square Test ( $X^2$ Test)

Null Hypothesis ( $H_0$ ): the observed average scores are equal to the overall average scores

Alternate Hypothesis ( $H_a$ ): the observed average scores are different from the overall theoretical scores

$X^2_C = \sum (O-E)^2/E$ , when  $X^2_C \leq X^2_t$ , Null hypothesis is accepted

$$X^2_C = 0.0111 < X^2_t \text{ at 5\% level of significance for 20 degrees of freedom} = 31.41$$

Hence, Null hypothesis is accepted. It means, all the average scores of the aspects are not significantly different from the most likely theoretical value of the aspects. As per the test the first hypothesis stands accepted which implies that all the aspects of learning organizations are equally popular. Which means that the seven dimensions viz., create a continuous learning opportunity, promote inquiry and dialogue, encourage collaboration and team building, create systems to capture and share learning, empower people towards a collective vision, connect the organization to its environment and provide strategic leadership for learning, as studied are almost equally important for the learning organization.

For analysis of the differences of the average scores of the two categories of the respondents on the basis of age-groups, the following tests were applied

1. Wilcoxon Matched Pairs Test (Signed Rank Test)

2. Two sample Sign Test

Hypothesis  $H_0: \mu_A = \mu_B$ ,  $H_a = \mu_A \neq \mu_B$

1. Signed Rank Test (Wilcoxon Matched Pairs Test): the test statistics T denotes the smaller value of the totals of signed ranks. T Test statistics is 14 while table value of T statistics is 59 for n= 21 and 5% level of significance.

But T (14) <  $T_t$  (59), hence null hypothesis stands rejected. This implies that the score values of the aspects separately for A and B groups are different.

2. Similarly, in Two Sample Sign Test  $S = 3$ ,  $K = (21-1)/2 - .98 \sqrt{21} = 5.51$ , Since,  $S < K$ , the null hypothesis stands rejected.

This indicates that the average scores of the attitude measurement for the aspects of the learning organization for the two groups are not equal. They are different. So, it implies that the average scores of the aspects of learning organization for the group of up-to 35 years of age are less than that of the age group of respondents above 35 years of age. This is obvious as the  $X_a = 3.87$  while  $X_b = 3.97$ . Thus, the age factor does have some impact on the attitudes for the aspects of the LO. With the advancement of the age, the score value of attitude measurement becomes higher. So, the third hypothesis stands accepted as with the advancement of age, impact improves.

For the analysis of the score values of attitudes for the parameters/dimensions of learning organization for all the employees, one sample sign test has been used.

$H_0: \mu_A = 3.89$ ,  $H_a = \mu \neq 3.89$

Total number of signs (n) = 6, number of less frequent signs

+ = 3, - = 3, Since (S) = 6

Critical value (K) =  $6 - 1/2 - 0.98\sqrt{6}$ , = 2.5 - 2.4, = 0.1, where  $S > K$ , (3) > 0.1, null hypothesis is accepted. This implies that all the parameters are equally important. Thus this test supports the second hypothesis.

To know the difference between the scores of the two groups for all the parameters/dimensions Signed Rank Test (Wilcoxon Matched Pairs) were applied. T statistics is 01 while table value of T statistic is 02 for n=7 and at 5% level of significance.

Being  $T(01) < T_t(02)$ , null hypothesis of no difference stands rejected. Hence there is a significant difference between scores of parameters of (a) group and (b) group employees. The second group average scores are higher than the first group average scores. Thus, this test again supports the third hypothesis of the research study.

## CONCLUSION

To conclude, it may be said that the 21 aspects that have been studied under 7 prominent dimensions of learning organization are equally popular as per the attitudes of all the manager cadre employees. In percentage terms, the level of agreement accounts for 78% contribution which is very significantly very large. It means that, creating a continuous learning opportunity in the organization, promoting inquiry and dialogue among employees, encouraging collaboration and team building, creating a systems to capture and share learning, empowering people towards a collective vision, connecting the organization to its environment and providing strategic leadership for learning are very important and should be an inbuilt part of a learning organization.

However, it was found that with the advancement of age of the employees, the score values of the attitude measurement of the employees of learning organization do make some improvement. This way, the analysis upheld all the three hypothesis with which the researcher started the study. The results of the study may be taken by other researches to conduct a study in another sector or on a larger scale because this study only covers the middle level employees and that is also limited to Delhi-NCR region only.

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**STUDY AND ANALYSIS OF USEFULNESS OF ONLINE MONEY TRANSACTIONS  
APPLICATIONS IN TRIBAL AREA OF RAJASTHAN**

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**ABSTRACT**

*This paper reveals insights of tribal people of Southern Rajasthan, whether they are using online money transaction or not. Tribal people put significant brunt on growth of an under development nation with a considerable tribal population. The economy of such countries direct proportionate with the tribal society. The study was conducted in Tribal Area in Rajasthan to analyze whether the Internet based Money Transaction System has been accepted by tribal people of Rajasthan or not. Data have been collected through a structured questionnaire and the hypotheses have been analyzed statistically. Answers of respondents is revealed that online money transaction system whether it is web based or a mobile application, it cannot easily be adopted by them because of low education rate and weak economy. The Government should first empower them economically. However, it is generally accepted that such applications can reduce the time of standing in queues and unnecessary depends on Banks, etc. They also show significant fear from cyber attacks. Not a good speed of Internet, shortage of electricity, etc are the challenges, which also need to be overcome. The result has been obtained by using Pearson chi square test, which shown a significant relationship in the predicted attributes on the tribal people plan to use online money transaction system.*

*Keywords: Online Money Transaction, Internet Based Economy, Cashless System, Tribal Area, Rajasthan*

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**1. INTRODUCTION**

Online money system accomplishes all operations through e-media, which includes Internet Banking, NEFT, USSD, AEPS, Debit & Credit cards, UPI, IMPS, various Mobile Apps, Payment Gateways, RTGS, etc. Almost every bank has started the facilities of online transactions. Bank customers are getting benefitted as it reduces the time of process, less risk of robbery, almost zero duplicate money. Digital Payments are also supporting the Government to fight against corruption and black money. These transfer interfaces are physically independency, time independency, global presence, consume almost zero papers and transfers without carrying real money [1]. The improved online systems are relatively user friendly, speedy, harmless, instant reporting and secured. For example, GCC exchange in Dubai has an in-house developed application named WebTT. In this software there are only four easy steps to be registered. All the required information is available on a single page.

In India, people frequently use PayPal as this application offers less fee, number of free-bees, instant transaction, government and private companies' interactions and obviously advanced security systems. However, it lacks, customized payment solution, use of fingerprint, multiple currency acceptations, multiple languages transactions, virtual terminals, etc. Reputed alternatives of PayPal are Google Wallet, Apple Pay, Amazon, Venmo, Payoneer, 2Checkout, Stripe, Skrill, Dwolla, WePay, Intuit GoPayment, Authorize.net, Due, Square and Payaza.[12] A number of case studies and statistical annex revealed that more than 70% population in developing countries like India where the a good amount of people resides in tribal and rural areas, have no linkages with good banking and money related services, therefore the hide the money in the lockers at their home or under the beds. [13]

It is also revealed that instead of web based payments, mobile phone based payment is frequently accepted payment system. Even in rural and tribal areas, use of smart mobile phones is increased in India. Such handy tools are most lovable instruments for communication and playing games in tribal areas. Therefore mobile commerce can become a solution which may offer the variety of cashless transactions for them and financial transactions can be done instantly by them.[14] Few other research revealed that any nation, who wants online money transactions, have to study cases of its variety of people "excellently" before starting any online money transaction system, otherwise there are chances of failure of that system[2]. Effective and faster structure of payment is one the seeds of evolution of a country. Related polices should have objectives to enhance the better implementation of tasks related to economy. Online Payments Systems must be scalable and stable. The Internet, Application, Equipments, Awareness, Security and usability of any Internet based payment system should capable to adopt variety of population, number of users and systems of corporate and government. Indian Government has succeed to catch the attention of Indian people, including tribal, to use online payment system by introducing a number of schemes viz. Lucky Grahak Yojna and Digi Dhan Vyapaar Yojna[7]. However, they may not implemented it on a sufficient level, government is still trying to implement the system,

for which few more schemes have been introduced like BHIM Mobile App, no Excise Duty on POS Devices, reduced fee of IMPS, NEFT, etc. [1].

Online Internet based payment methods are the power of present economy of any nation [4]. In any case technological innovations, user friendliness and improved economical models are required [15] to implement such systems in a nation including its tribal area [5]. The tribal population of India may not accept these systems, as they are habitual of using physical cash. They may deny using of online money transactions due to their long-established customs of saving the physical cash, unawareness, slow or no Internet and lack of buoyancy [3].

## 2. LITERATURE REVIEW

**Alvares Chu et al. (2016)** have developed a Smartphone based efficient money transaction system. In this system they overcome the various issues of the current payment system. It is more secured and stored no sensitive information of its customer. This application may be useful for tribal people.

**Bhavesh J. Parmar, et al. (2017)** have analyzed that consumers of online banking systems expect it should be less time consuming, user friendly and secured.

**Kevin, Clifford (2017)** concluded in their reports that by implementing online payment system and after that few more steps become it easier to get rid from duplicate currency.

**Minmani Obinto et al. (2015)** have revealed that numerous steps have already been taken to implement online payment system in India and numerous people accepted that in positive way, it is still tough to implement this in rural area due to their traditional thoughts.

**Vidhi P. Kakkad (2017)** conveyed in their study – there is lack of awareness in many people, technology uneducated people are facing difficulties on using cashless system in India. Therefore, it is impossible to develop 100% cashless societies; therefore the idea of less cash system seems better than cashless system. In any case Indian people strongly believe that cashless systems are good signs of development of India.

**Menariya P.M. (2017)** analyzed that the usefulness of debit/credit cards and Internet banking in Rajasthan. The analysis revealed that use of cards and online banking is significantly influenced by various parameters like Rural/Urabl, Users' Age, Users' Awareness, Income and background.

**Mathangi R1., Latasri O.T.V2 and Isaiiah Onsarigo Miencha (2017)** expressed that the Indian departments of TRAI and DOT need to implement well-built procedures for issuing of duplicate SIM card, which is one of the largest cause of cyber frauds. Lawyers and Judges of courts have to be trained in handling cases related cyber crime. Functional and 24x7 monitored CC TV cameras to be installed in every ATM. Frequent collection of forensic reports is to be done. They also suggested that literacy programmes for safety aspects among rural, illiterate and old-age people have to be conducted.

From the above literature review it is found that there are issues of slow Internet connection, unawareness, traditions of having physical cash, etc. are exist in tribal areas. We may say that it is tough to implement online payment systems in tribal areas but in anycase not impossible. The biggest challenge is reliability and stability of POS. Government has enough funds to implement these. The fees for online payment system should be basis of number of transactions, business or domestic use and socio-economic level. Tribal people may deny use of online payment system due to variety of reasons, like illiteracy and unawareness. Educating them and making them aware can help a lot in implementing such systems.

## III. OBJECTIVES OF THE STUDY

**The major objectives of this study are**

1. To know whether the Online Payment System can be adopted among tribal people of Rajasthan or not.
2. Whether the tribal people of Rajasthan are ready to become educate and aware for Online Payment System.

**Minor objectives are as follows**

1. To know if the tribal people of Rajasthan understand importance of Online Payment System.
2. To assume and assess the proposed methodologies for tribal users of Online Payment System.
3. To understand the risk associated with Indian Cashless System in perspective of tribal people.

## IV. RESEARCH METHODOLOGY

This study is performed to acquire information about adoption of Online Payment System among tribal people of Rajasthan. A sample of 75 tribal people was selected using the convenience sampling procedure out of which

72 have answered. Therefore the response rate was 96%. Such responses have been recorded through a questionnaire in survey. The questionnaire consists of 35 questions like The Online Payment System will minimize the duplicate currency, can it be stopped corruption, risks associated, feared or already aware, literacy is required, etc. Respondents were asked to put their opinion on a likert scale, which is from 1- 10.



The major attributes which have been used to prepare the questionnaire are Traditional Values, Convenience, Quality, Availability of Resources, Awareness and Fear according to Literacy and Age. Under these attributes minor attributes have been mapped like User friendly, Applicability, Trust, Willingness, etc. we believe that these attributes could develop a mind-set to accept online payment systems. The analysis is done by the Pearson chi square test.

**Following are the Hypotheses**

Null Hypothesis H0:  $\mu d = 0$

- H1: Intention has a positive significant effect on actual behavior.
- H2: Mind-set has a positive significant effect on intention.
- H3: Usefulness has a positive significant effect on intention
- H4: Ease of use has a positive significant effect on Mind-set
- H5: Age has a positive significant effect on Mind-set
- H6: Literacy has a positive significant effect on Mind-set and Intention
- H7: Creditability has a positive significant effect on Trust
- H8: Quality has a positive significant effect on Trust

**Table-1: Demographic profile of samples**

Area			Age		
Group	Frequency	Percentage	Group	Frequency	Percentage
Tribal in	20	27.78	<25	16	22.22
Urban	52	72.22	25 – 35	26	36.10
Tribal in Rural			35 – 45	20	27.78
			>45	10	13.90
<b>Total</b>	<b>72</b>	<b>100</b>		<b>72</b>	<b>100</b>

Education			Online Payment System’s user		
Group	Frequency	Percentage	Group	Frequency	Percentage
Less than UG	49	68.05	Bank Cards	10	13.90
UG	13	18.05	Internet Banking	2	2.78
PG or above	10	13.90	Mobile Banking	0	0.00
			Nil	60	83.32
<b>Total</b>	<b>72</b>	<b>100</b>		<b>72</b>	<b>100</b>

**V. RESULTS AND DISCUSSIONS**

**Table-2: Descriptive Statistics of the attributes**

Attribute	Mean	Standard Deviation
Intention	4.43	0.66
Mind-set	4.15	0.57
Trust	3.99	0.58
Actual behavior	3.77	0.59

Looking into the table 2, it can be said that all means are greater than 3.0, therefore it can be understood undoubtedly that positive response is found to the all calculated attributes for this research. Standard deviations

were also obtained less than 1.0 in every case. Hence, it is found that the item scores were around the mean scores.

Hypotheses were also calculated by confirming the statistics and data. The null hypothesis is such that  $H_0: \mu d = 0$ , which means various attributes are not significantly associated with intention and age, literacy is not significantly associated with mind-set. However, it is also obtained that,  $H_1$  to  $H_8: \mu d \neq 0$  which means various attributes are significantly associated with intention and Age, literacy is significantly associated with the mind-set. A significant relationship is also obtained with the predicted attributes on the users' intention to use online payment system.

## VI. CONCLUSION

To achieve the fully implemented Online Payment System in tribal area of Rajasthan, few insufficient steps have already been taken. When age and literacy are significantly associated with use of Online Payment System, need of more awareness programmes is there. Old and less literate tribal people of Rajasthan less interested in using of such system. Such systems should be more user-friendly and more secured and updated regularly. The challenges in implementing Online Payment System in tribal area of Rajasthan, includes slow Internet connections, Electricity problems, illiteracy, small infrastructure, cyber crimes, unnecessary fee, instable software application etc. From this study it is also found that that the tribal people understand that online money transaction systems are useful but they should be easy to use for every age people.

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**EMERGING TRENDS IN THE TEACHING AND LEARNING**

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**ABSTRACT**

*This paper deals with an explorative research into the use of emerging technologies for teaching and learning. An important stimulus for this research is the skills gap. The rapid changing demand puts a lot of pressure on education and the promise is that technology might help to solve the problem. The expectation is that indeed the next generation of technologies will affect education more profoundly, because of the increase and the vast integration of these technologies in our society at large. Engineering education has been reluctant in accepting technologies for learning, but the speed of change needs to be acknowledged and education cannot continue to say that the demand for new skills is a world we do not know yet. The exploration starts with an assessment about what kind of technologies are at stake and what their contribution might be for education. Recent research and reports are used to value the educational technological developments; representatives from industry and education have been interviewed and a small number of experiments are being executed to gather further knowledge and experience. At the time of writing these experiments are ongoing, but we allow to zoom in on Virtual Reality (VR) as one of the most promising technologies. The focus in this research is on the perceived value for education and therefor the exploration is very much related to the triangle perspective of student – teacher – organization as interrelated stakeholders and decisive for the usability of technology. The guiding questions are: what is the perceived value for the students; what is the value for the teacher and what are the consequences for the organization? The one thing that emerges is that engineering education needs to be much more proactive to master the question about technology in teaching and learning. This ongoing exploration is an initiative of the 4TU Centre for Engineering Education which is part of the 4TU Federation being an alliance of the four technical universities in the Netherlands.*

*Keywords: Emerging technologies, 3D Environments, Virtual Reality, Higher Engineering Education Standards 6, 7, 8, 9.*

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**INTRODUCTION**

Higher education is poised to better prepare students for the labour market and therefore helping to endow vital innovative and creative skills (Kamp, 2016; World Economic Forum, 2015 & 2016). The increasing expectations also contain the believe that the use of technologies will help higher education to become more innovative and productive (Klopfer, 2016). However, technological adaptation does not necessarily suggest better performance. Some believe that technology is the way to go (Johnson et al. 2017), others (Bruyckere et al. 2015) believe that the effect of technology on teaching and learning has been limited and expect that it will not fundamentally change education. It is evident that our society at large, including education, has been infiltrated over the last decades with technologies and tools that have affected our way of life in a rather profound way (World Economic Forum, 2016). This is also true for the educational community. The smartphone is a prominent example and can be considered an important reference to judge the prospect of technology on a day-to-day basis. As such education shows the same pattern of technology use as society as a whole. The added value depends on the situation and the goal one has with the technology and which combinations of technological tools are used. The believe that technology should have a stake in making education more innovative and productive requires a better understanding of what technology can do for education. This is a rather difficult question, because the decision about the usability of a technology or tool is being hampered by the increasing number of different emerging technologies, the speed of development, the multitude of educational settings and the time it takes to research all this (Higgins, 2012). These are reasons why teachers, educators and institutions have a hard time to develop a strategy and in the end to select and apply technologies (Johnson et al, 2016).

**PROBLEM STATEMENT**

The purpose of this exploration into emerging learning technologies and emerging practices is the potential relevance for teaching and learning. The discussion on the value of Virtual labs was a starting point for the 4TU Centre for Engineering Education and it turned out that traditional Lab situations change rapidly using all kinds of other and new technologies to make things work according to today's standards. So, contemporary Virtual labs necessarily contain many more technologies which in general belong to the technologies we have qualified here as emerging technologies which also independently show to be of use for education. The purpose of this endeavor is to see what is being used already in HE and identify the added value for the learning process, to

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identify technologies that have the potential to contribute from the teacher's perspective and to see which experiments would be meaningful to help develop a strategy to deal with the emerging technologies and educational practices. This research is ongoing and the outcomes presented in this paper comprise most of the findings from desk research and interviews, but only part of the experiences with the experiments, which are half way through at the time of writing.

### **THE RESEARCH CONTEXT**

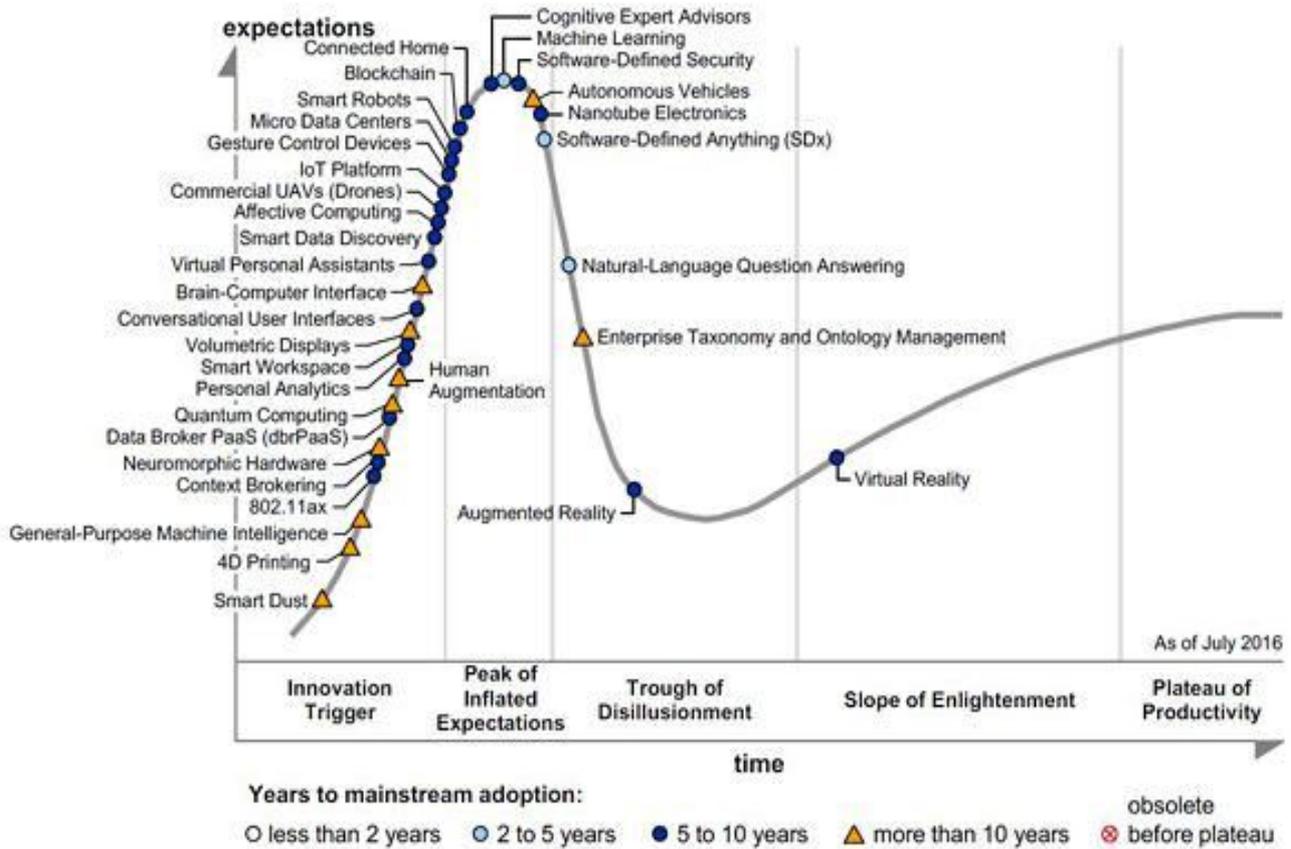
What technologies are qualified as emerging technologies? These are recent developments that have not yet been widely adopted, but are expected to influence educational practices as there is 3D printing, Makerspace, BYOD (Bring Your Own Device), Internet of Things and such applications as Open Source, Learning Management Systems, Virtual Reality. They tend to be in a dynamic state of change as is the case with Twitter, Facebook and Virtual Reality which will most likely be further developed and refined. These also include tools that become obsolete, stop to exist, are withdrawn or merge with other developments (Johnson et al, 2014, 2015; Veletsianos, 2016a, 2016b). In most cases, it is difficult to understand the value or the implications of these technologies for education. The promise of these technologies also relies on factors hard to influence like politics and economics. So, it is crucial to have a certain level of understanding to be able to judge if a technology might help or not. This research is an attempt to develop a way of working that allow students and teachers to investigate, test, and assess the usability of a technology in their micro-environment of teaching and learning.

The general availability implies that every technology can be considered to play a role. Interestingly the most used technologies in education are not developed for education, but are consumer technologies, in other words developed for use by the general public. Jane Hart ([www.c4lpt.co.uk](http://www.c4lpt.co.uk)) has compiled a top 100 Tools-for-learning list over the last ten years and clearly the top ten of this list has always been tools like YouTube, Google search, Twitter, Power point, Google docs, Facebook, Skype, etc. In 2016, the first dedicated educational technology is the open source course management system Moodle on place 27.

Learning technologies as such play a minor role in technology development in general which underlines the fact that education is a follower and consequently lags behind. It seems there for encouraging that at this moment the investment in educational technology is ten times more than it was a decade ago (Goldman Sachs, 2016). The promise is that technology is poised to influence education in virtually every aspect of how we teach and how we learn. At the same time, we know that technology use in education has always been rather complicated as it is hard to decide about the value, because of the diversity of technology and educational methodologies being used and the perceptions of their impact on the learning results or students (Higgins, 2012; Kirkwood et. al, 2013). It is evident that technology engages and motivates young people (World Economic Forum, 2015). However, this benefit is only an advantage for learning if the activity is effectively aligned with what is to be learned. So, the impact is not whether technology is used (or not) which makes the difference, but how well the technology is used to support teaching and learning (Brinson, 2015; Janssen et al, 2016, King et al, 2017). The increasing variety in technologies and applications and the speed of development make it difficult to decide about the technology and about the integration in teaching and learning. The challenge is to ensure that technology contributes to improvement.

### **RESEARCH FOCUS**

The purpose of this exploration is to find ways of how to deal with these technologies from an educational point of view. In this stage of the research the main questions are about the added value for students, for teachers and the consequences for the organization.



Source: Gartner (July 2016)

Figure-1: The Gartner Hype Cycle (2016)

The exploration is limited to technologies that are considered relevant and usable within a certain period of time (Gartner, 2016; King et al, 2017). The first part of the paper deals with the general review including a selection of emerging technologies. In the second part the focus is on the technology that is considered the most promising for the years to come, which is Virtual Reality (VR). As can be seen in the Gartner hype cycle (figure 1), VR is poised to enter the market rather soon. The hype cycle report on emerging technologies provides a cross-industry perspective on technologies one should consider in developing emerging-technology portfolios (Gartner, 2016). The Gartner analysis is an estimation about the timeline for technologies to reach maturity. The financial analysis by Goldmann Sachs (2016) on the emerging investments in VR seems to support this estimation. Therefore VR was selected to be used as an illustration of the kind of technologies and functionalities that are likely to affect education in the short run.

**LITERATURE REVIEW AND OTHER RESOURCES**

**Emerging technologies and education**

The emerging technologies considered here are not yet widely adopted, but are expected to increasingly influence educational practices. These technologies like 3D printing, the Internet of Things, Virtual Reality, etc., are progressive developments which ought to bring a competitive advantage, but the way they develop makes it rather difficult to grasp the value for education (Johnson et al., 2014, 2015; Veletsianos, 2016a; Wikipedia). They are in a dynamic state of change, continuously refined and developed, which might even include the fading away of tools as they become obsolete with regard to new developments. This is even more noticeable when zooming in on Virtual reality as one of the most promising technologies for teaching and learning. Veletsianos (2016a, 2016b) claims that we do not have the tools yet to understand the implications of these technologies on educational practices, teaching, learning, and institutions, because it has not been thoroughly researched yet. He also argues that we should stay away from techno-utopian and techno-deterministic thinking, because the promise of a transformation mostly ignores a variety of factors that are hard to influence like politics and economics. Higgins (2012) confirms that the diversity of contexts and settings and the different methodologies make it difficult to identify clear and specific implications for educational practices. So, no general statement about the impact of technologies, but also no unified strategy of how to cope with these new developments.

The assumption in this exploratory research was that technology can help to improve education. Overall, the research evidence over the last forty years about the impact of digital technologies on learning consistently identifies positive benefits (Higgins, 2012). It is clear though that the diversity of contexts and settings and the different methodologies make it difficult to identify clear and specific implications for educational practices. In some cases, it seems that effective schools know how to use technology more effectively than others, but is this true under all circumstances? In general, it seems that technology use does not make the difference, but how well the technology is used to support teaching and learning practices and how well it is aligned with what is to be learned and the underlying pedagogical assumptions of the teacher (Kirkwood et al. 2013; Janssen, 2016). No magic box here and no guarantee that technology use will logically lead to better results. So, why use technology? The meta-analysis by Higgins (2012) and the one by Zubia (et.al, 2016) support the assumption that technology indeed might be of help, but the role needs to be clear, which is related to the functional criteria for educational design, access to content, feedback, collaborative effective interaction? These are no easy questions, also because digital technology is not introduced in a vacuum. It is therefore very important to identify carefully what it will replace or how the technology activities will be additional to what teachers and learners would normally experience.

The teacher plays a crucial role in all this. Some love to experiment with technology, others despise the fact that technology carries a substantial amount of uncertainty and prefer proven solutions. After all these years in which teachers have been confronted with technology it is obvious that a clear strategy is needed to make it work (Davis, 1989; Mesquita et al., 2016, King et al, 2017). Mesquita (2016) reveals that the success of technology adoption relates to several critical organizational and individual factors with enablers like organizational strategy and support, training, equipment and applications and constrainers like intellectual property, credits, development of new materials, etc. Surely not all factors are equally important at all times, but without a clear strategy technology will continue to be very unpredictable and difficult to use for teachers in their micro-teaching and learning context. Teachers are known to be skeptical about the value of technology, the appreciation though seems to increase with the instructor's experiences (Jaschik et al, 2016). This appreciation is considered to increase as well with evidence-based confirmation that technology helps to improve teaching and learning practices. Because of the diversity and the speed of development research in this area has become more complicated. In addition, the research concepts and instruments that have been used in formal environments like in the traditional classroom may not be the right approach to assess the value of new technologies (Poquet et al, 2017).

### **VIRTUAL REALITY AND EDUCATION**

Here we zoom in on Virtual Reality as an example of a technology that is poised to influence teaching and learning more than anything else. This explorative approach should allow for a better view on what it is, how it works and what the promises are for education.

Virtual reality (VR) is a computer technology that uses special headsets to generate images, sounds and other sensations that imitate a real environment or create an imaginary setting. It can also simulate a user's physical presence in this environment. It is a simulated 3D 360 - degree environment which can be experienced or controlled by movement of the body or a computer. One can look around in the artificial world using VR equipment like the headset, which are head-mounted goggles with a screen in front of the eyes. Programs may include audio and sounds through speakers or headphones. Some VR systems used in video games can convey vibrations and other sensations to the user through the game controller. It also supports remote communication environments through a type of telepresence or tele-existence. The expectation is that VR will quickly develop and the goggles (figure 2) certainly will not be the end product as was shown by the success of Pokémon Go (Carlton, 2017).



Figure-2: Virtual Reality Headset (Goggles)

The largest user group of VRs is the gaming world, but increasingly this 3-D technology is being adapted and used in sporting events, entertainment, marketing and real estate. Companies increasingly see the potential for recruitment, on the job training and teambuilding. Specific applications are developed for industries like the military, medical training, warehouse training, sports.

The promises for education are that the learner is in control of the immersive environment, can move around, explore, try things out, take tests multiple times, explore different solutions. The one thing VR evokes is physical motion in a simulated real world, feel emotions, excitement, and curiosity. It is about the experience the learner has, how it engages and stimulates the senses and how this can help to improve the learning experience, in other words what are the benefits? The analysis of Dalgarno (2010) and Fowler (2015) of 3 -D Virtual Learning Environments (VLE) show five affordances which are: spatial knowledge representation, experiential learning, engagement, contextual learning and collaborative learning. These affordances directly relate to learning benefits. To design pedagogically sound 3-D VLEs though more applied research is needed, because models and frameworks are missing to develop evidence-based experiences and most studies retain the existing pedagogy while using new technology (Fowler et al, 2015). Also the research approaches are rather traditional, which means that it will be hard to capture what can be beneficial for very different VR supported teaching and learning practices (Poquet et al, 2017).

In 2016 and 2017 prices for VR headsets plummeted and the option of using your smartphone for a VR experience has enlarged the opportunity for education to experiment. An example of what is happening: Pennsylvania State University has received funding to build a virtual engineering lab where students hold, rotate and fit together virtual parts as they would with their real hands (Wertz, 2016). VR is seen as very helpful in subjects as engineering and architecture to design and manipulate virtual structures. The question still is if the students learn as well with VR as in the classroom. There will be no one answer, but the need to find out is urgent.

## **METHODS**

This ongoing research into ‘emerging technologies’ started with an inventory of technologies and tools that potentially give way to innovation and are used or about to be used in one of the four Dutch technical university institutions. The inventory was based on both a literature review and a review of reports and web resources like blogs and others and included a series of interviews with stakeholders in engineering education and at representative industries.

The key words used in the review were: emerging technologies, emerging learning practices, 3D environments, virtual labs, virtual experiments, remote labs, remote experiments, virtual reality, augmented reality, learning technology, educational technology, informal learning, self-directed learning, micro learning, design based education, skills gap, 21<sup>st</sup> century skills

The technologies selected for general review were: Virtual and remote laboratories, BYOD (bring your own device), Makerspace, Internet of Things (IoT) and Virtual reality. For the indebt analysis Virtual reality was selected for reasons of potentially high impact. Interviews were held at the Dutch Technical Universities (N=12) at different disciplinary domains such as Electrical Engineering, Civil Engineering, Systems Engineering, Industrial Engineering, Math & Computer Technology, Science and Technology and the School of Education. The foreign Universities and industry include site visits (N=4) and additional informal conversations. The interviews were semi structured and covered the following issues: the what, why and how of new technology use; the perceived value; the experiences; the type of technology and the expectations regarding the students’ learning process. The small experiments planned as part of the inventory should allow for a more thorough analysis of the what and how. These are at the time of writing halfway and will be reported in due time. The results chapter illustrates the outcome of the inventory and interviews, and represent an indication of the findings, which will eventually be complemented with the outcome of the experiments.

## **RESULTS AND OUTCOME**

The main reason for this research was the assumption that the emerging technologies are expected to become highly relevant for teaching and learning. This exercise was guided by the question about the perceived added value for the student, the perceived added value for the teacher and the organizational consequences? This research so far is to be considered a first step to get a better understanding of the opportunities of these technologies for teaching and learning.

### **Emerging technologies**

The purpose of this inventory was to verify what the educational benefits might be of these technologies. Most resources for this exercise were web based coming from stakeholders like producers and vendors who dominate the information channels and therefor the level of verification and argumentation of the educational benefit was

at times trivial. Next to these channels are the research institutions and larger companies that reflect on these technologies with their business in mind. Hardly any evidence based research can be found, apart from some interesting findings in niche areas. This is logically related to the fact that the overall diversity of technology and the very different teaching and learning practices are hard to deal with and takes time. For the inventory, which included the interviews, we used as the main point of reference the perceived value for the triangle of students and teachers in relation with the organization, which is reflected in table 1 with a summary of findings for virtual reality, Internet of Things, Makerspaces and BYOD (bring your own device).

**Virtual reality**

Is about computer-generated environments that simulate the physical presence of people and objects to generate realistic sensory experiences

**Internet of Things (IoT)**

Is a network of smart physical objects, which can be interlinked into a functional aggregation in which the whole is more than the parts. This sounds futuristic, but we all are experiencing how the connected home, the connected workplace, and the connected government is coming to life.

**Table-1: Emerging technologies: summarized findings**

Relevance for education	Student	Teachers	Organisation
<ul style="list-style-type: none"> <li>Virtual reality can mimic our sensory experience of the world</li> <li>It helps to construct an authentic learning environment</li> <li>Learning with strong spatial, physical and interactive focus</li> <li>An asset for inquiry-based learning</li> <li>Potential for the training of practical skills</li> <li>Contextual settings that mirror real world situations</li> <li>Great potential for learning analytics</li> <li>Powerful instrument for data collection Stimulate learning experiences in a physical space</li> </ul>	<ul style="list-style-type: none"> <li>The VR world can be experienced with others</li> <li>Provide a contextual learning experience</li> <li>Enables students to construct broader understanding based on interactions and virtual objects</li> <li>Deeper levels of cognition and new perspectives</li> <li>Exposure to real world companies and technologies</li> <li>improved learning experience, feedback and support new learning experiences</li> </ul>	<ul style="list-style-type: none"> <li>Enables students to have life like experiences</li> <li>Positive impacts on the classroom, including enhanced group dynamics and peer-to-peer learning</li> <li>Placing the course in a rich contextual setting</li> <li>Mirror the real world in which new knowledge can be applied.</li> <li>Avoid tricky laboratory settings and offer 24/7 opportunities to test, analyse and report</li> <li>Dashboard-like tools to support students at the point of time and need.</li> </ul>	<ul style="list-style-type: none"> <li>Incorporating VR learning environments into education programs</li> <li>Serve the geographically diverse students with on-campus experiences</li> <li>Facilitate group projects, discussions, networking</li> <li>Renewal of staff development aiming to equip teachers with the</li> <li>Skills and means to select, test and decide about technology use. delivery.</li> <li>Implications for privacy and security</li> </ul>

**Makerspaces**

Makerspaces are informal workshop environments located in community facilities or education institutions. They offer tools and learning experiences to help people carry out their ideas. The driving force behind makerspaces is the maker movement.

Relevance for education	Student	Teachers	Organisation
<ul style="list-style-type: none"> <li>Tools like 3D printers, robotics, and 3D modeling applications become accessible to more students.</li> </ul>	<ul style="list-style-type: none"> <li>Makerspace aims to help its students develop digital literacies and engage in self-directed learning.</li> </ul>	<ul style="list-style-type: none"> <li>Hands-on design and construction engages students in creative problem-solving and higher-order thinking</li> </ul>	<ul style="list-style-type: none"> <li>Makerspace as a tool for learning space redesign.</li> <li>Gained traction in only a couple of years</li> </ul>
<ul style="list-style-type: none"> <li>New opportunities to stimulate creativity,</li> </ul>	<ul style="list-style-type: none"> <li>Provide a place for</li> </ul>	<ul style="list-style-type: none"> <li>Engineering curriculum primarily</li> </ul>	<ul style="list-style-type: none"> <li>Often developed as an extension of the</li> </ul>

design, and engineering.	users to engage in self-directed activities that help them identify passions and interest.	focused on theory and mathematical modelling	campus library.
<ul style="list-style-type: none"> <li>Allow to gather and create prototypes or products in a collaborative, do-it-yourself setting.</li> </ul>	<ul style="list-style-type: none"> <li>Supplies a space with multimedia and 3D print production, video, audio, animation and 3D modeling.</li> </ul>	<ul style="list-style-type: none"> <li>Makerspaces provide the opportunity to partake in hands-on Activities.</li> </ul>	<ul style="list-style-type: none"> <li>Dynamic collections of tools as virtual reality equipment, digital editing software, 3D printers as such.</li> </ul>

**BYOD (Bring Your Own Device)**

BYOD is a smart move to use all available technologies in the learning community to access and interact in a flawless way. It reflects the contemporary lifestyle and way of working (mobile phone). Important question is how to most effectively integrate and support them.

Relevance for education	Student	Teachers	Organisation
<ul style="list-style-type: none"> <li>The link between personal devices and Learning.</li> </ul>	<ul style="list-style-type: none"> <li>Students expect to be able to use whatever devices.</li> </ul>	<ul style="list-style-type: none"> <li>Need to integrate this option where relevant (organizational, assignments)</li> </ul>	<ul style="list-style-type: none"> <li>Supporting technology and staff to develop and maintain developments in line with the 'technology policy'.</li> </ul>
<ul style="list-style-type: none"> <li>The question about how to most effectively integrate and support them.</li> </ul>	<ul style="list-style-type: none"> <li>They choose to access learning content, take notes, gather data, and communicate.</li> </ul>	<ul style="list-style-type: none"> <li>Have a 'deck' to work from.</li> </ul>	
<ul style="list-style-type: none"> <li>Facilitating ubiquitous learning and productivity gains.</li> </ul>	<ul style="list-style-type: none"> <li>Using their mobile 24/7 for communication and access.</li> </ul>	<ul style="list-style-type: none"> <li>BYOD enables students and educators to leverage the tools that make them most efficient,</li> </ul>	<ul style="list-style-type: none"> <li>BYOD policies are enabling faculty to update the ways in which they deliver content and assess student learning</li> </ul>
<ul style="list-style-type: none"> <li>With home-made dedicated apps faculty can update the deliverance of content and assess student learning.</li> </ul>		<ul style="list-style-type: none"> <li>Could include location-based services, social networks, and video streaming.</li> </ul>	

Resources: Adams et al., 2017; Briggs et al, 2016; Carlton, B., 2017; Janssen et al, 2016; Jaschik et al, 2015; Johnson et al., 2015, 2016; King et al, 2017

**THE RELEVANCE FOR TEACHING AND LEARNING**

The interviews in the institutions showed that most of the emerging technologies were used for research goals in different disciplinary domains and not to support teaching or learning. There was no analytical framework or educational model available or an overview of technologies used in the available learning practices. If technologies were used, the people involved were highly convinced of the added value and those who did not use it for educational purposes were willing to take a closer look, but only if educational support would be available to help them master the situation.

The kind of technology use in education is quite fragmented. In the interviews, we specifically considered tools prepared for learning and teaching. In reality education is very much like the real world in which different types of technologies are used for all kinds of purposes.

Technologies like Twitter, Facebook, YouTube, Google docs, etc. are consumer technologies not developed for education, but widely used to share, improve, validate and better organize education. So, emerging technologies influence emerging practices, but will do that in very different ways (Veletsianos, 2016a). In that sense, it is helpful to distinguish the different kind of technologies that are available for education, which are not necessarily developed for it and might serve very different purposes or even become contra productive.

The discussion with stakeholders from two technical universities abroad revealed that the use of technology is a must and is seen as a prerequisite for learning innovation. Therefore the link between technology and the advantages are considered crucial. This requires a healthy collaboration with the industry using experiments and pilots to deliver value for all partners. High on the agenda was the combination of the existing educational practices with the new approaches. A vision and strategy is needed also to deal with the demand for new competencies. The outcome of the discussion with Industry started with a broader view on the role of technology. High on the agenda is the need to bridge the skills gap for today's students, which is partly created by rapid technological change and short business cycles. The use of technologies in industry is a must and consequently a must for learning and for learning innovation. The response of Higher Education seems not efficient enough which is limiting the collaboration with industry and that is considered detrimental for the economy. New technologies like VR- engines are used to support daily working practices, but also to bridge time and place and master quickly changing product knowledge.

There is a clear message from the industry: education needs a vision and strategy for the integration of emerging technologies and the engagement of institutions and teachers to master the process of using technologies to support learning activities. Training should be up to date, focus on new developments, provide skills for just in time and self-directed learning and for transferrable and collaborative skills learning. Despite the fact that the competences level of students has increased in this area it is not enough as industry needs people with multi-level skills that can work with cobots, across disciplines and with an understanding of the design and technology. AI, is at our doorsteps, albeit not very intelligent yet, but it will not take long before AI will guide systems for deep learning. Thus, education should keep pace, support and supply guidance for educational improvement to overcome the time to market pressure. VR engines co-created with education (technical universities) and companies like Philips, ASML, OCE, Dassault systems should offer numerous opportunities for collaboration. Naturally a viable business model to assure sustainability is of utmost importance and in this context, it is to consider the possibilities for collaboration with market leaders like Amazon, Facebook on a national or even regional level to create a better alignment with regular education.

The one thing that surfaced was that emerging technologies in a technical environment do not stand out. Most teachers are in one way or another familiar with these technologies, but use these predominantly as an asset in their research and not to improve education as such. Also, in none of the institutions was a validated activity or organizational structure yet dealing with the question of emerging technologies for education.

## **CONCLUSION**

An important driver for the analysis of emerging technologies is their assumed benefit for education. To find out what this could be is being hampered by the increasing number of different technologies, the speed of development, the multitude of educational settings and the time it takes to research all this. An increasing level of investment in educational technology will surely help, but it is evident that the impact is not whether technology is used (or not) which makes the difference, but how well the technology is used to support teaching and learning. Students will need to know, but clearly also teachers need to have a better understanding of what technology can do for education. Staff development seems to be the ultimate way to go, but the reality is that staff development in itself often is a slow follower and not capable of supplying the teacher with the support needed. As a consequence, there is a need to develop a way of working in which teachers are equipped to investigate, test, and assess the usability of a technology in their micro-environment. To make this happen, the institute will need to reconsider their innovation policies and develop a broader participatory design approach to better deal with the demands for innovation.

The industry is worried about the capability of education to make the technologies work that are expected to help bridge the skills gap for today's students. Also doubts arise if the current research practice is capable of dealing with the new developments in a proper way.

As can be seen from the analysis of VR as a promising tool for learning innovation, there is no general consent yet about the value of 3D environments for education. This is related to the speed of development of the technology and the current applications, which show nice results, but lack scientific confirmation yet. It seems that the only way to find out what these technologies can do for education is to try it out and as such develop experience and knowledge to properly deal with the challenges and opportunities. Engineering education needs to become more proactive to master this question about emerging technologies.

## **ANALYTICAL SUMMARY**

This paper presents the early findings of an ongoing research into the value and implications of emerging technologies. The scientific standard was not as tight as we would have liked it to be. Yet we feel it is a relevant

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starting point for further discussion about emerging technologies. These will affect and change the skills set of our future workforce dramatically and influence the approach to work in general.

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## SWOT ANALYSIS: BEST PRACTICES FOR ENHANCING QUALITY IN EDUCATION

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*The educational system of the 21st century must be oriented toward creating conditions that allow students to act and learn freely in productive collaboration with their teachers, and also with their parents and other members of their community, local and global. According to futurist Alvin Toffler "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn." SWOT analysis is a technique that enables a group or individual to move from everyday problems and traditional strategies to a fresh perspective. This paper tries to explore how effective implementation of SWOT analysis practices is useful to facilitate the institutional growth in order to ensure quality by analyzing both internal and external factors.*

*Keyword: Strengths, Weaknesses, Opportunities, Threats*

**1. INTRODUCTION**

Globalization and technological change have created a new global economy "powered by technology, fueled by information and driven by knowledge." The emergence of this new global economy has serious implications for the nature and purpose of educational institutions. The conditions of operation of educational institutions and even its external limitations may render some of the alternative solutions problematic or prohibitive in some cases. On the contrary, as Koutouzis claims (1999), the conditions of an organization concern simultaneously not only its internal but also its external environment. Obviously, it would be naive for anybody to create a strategy for achieving a goal without taking into account the organization's strengths and weaknesses as well as the competitive environment (Linn, 2008). The situation being like that, strategic management has not changed since its early inception, with SWOT (strengths /weaknesses/opportunities/threats) analysis serving as the fundamental methodology for formulating the firm's strategy. The underlying premise in this approach is to match the firm's distinctive competencies and resources with the market to create a perfect match between the firm and the external environment and thereby develop a sustainable competitive advantage (Miles and Snow, 1984). This specific analysis of the above factors known as SWOT Analysis- a term that comes from the acronyms of the words Strengths, Weaknesses, Opportunities and *Threats* is regarded as an integral part of the strategic planning procedure, irrespective of its kind (Athanasoula & Reppa 1999). The strong and the weak points of an organization constitute factors of its internal environment while the *opportunities* and the *threats* are considered to be parts of its external environment. To be more specific, elements of the internal environment are the school administration, the place, the human resources, the audiovisual teaching means and the school number of students-teachers. On the contrary, factors that represent the external school environment are the general social, political, economic, cultural and technological forces and influences that are imposed in it (Saitis, 2007).

The significance of SWOT Analysis is that this technique is familiar and easily understandable by people and it provides a good structuring device for sorting out ideas about the future and an organization's ability to exploit that future. The reason why it has become so widely known is because of its inherent attractions, which are (Piercy & Giles, 1989):

SWOT analysis provides us with a device to structure the awkward mixture of quantitative and qualitative information, of familiar and unfamiliar facts, of known and half-known understandings that marks strategic marketing planning. In its most simplistic form, a SWOT analysis leads to one of four major conclusions (Sherman, Rowley and Armandi, 2007):

- **Strengths outweigh weaknesses, opportunities outweigh threats:** supports a growth strategy.
- **Strengths outweigh weaknesses, threats outweigh opportunities:** supports a maintenance strategy.
- **Weaknesses outweigh strengths, opportunities outweigh threats:** supports a harvest strategy.
- **Weaknesses outweigh strengths, threats outweigh opportunities:** supports a retrenchment strategy.

The basic results of a SWOT analysis can then be included in the institution's profile and compared to the institution's characteristics. This profile can then be compared to determine how well the institution is internally aligned as well as aligned with its SWOT analysis (Sherman, Rowley and Armandi, 2006).

**2. AIMS OF SWOT ANALYSIS**

- Take advantage of strengths and opportunities.
- Minimize weaknesses and eliminate threats.

**3. BENEFITS**

- Solving problems
- Implementing change
- Developing strategies for achieving the organization’s objectives and mission

**4. TIPS FOR SWOT ANALYSIS IN EDUCATIONAL INSTITUTIONS**

- Do not hide or underestimate threats or weaknesses if you ignore them or underplay them now they will come back to haunt you at some stage probably when they can do most damage?
- The goal of any session like this is not necessarily to neutralize any weakness or threat that is impossible but to have it on your radar and where possible take avoiding action. To some extent it is all about risk.

**5. AN EXAMPLE OF A SWOT ANALYSIS FOR EDUCATIONAL INSTITUTIONS**

Use an example of a teacher who is newly appointed and wants to improve the relationships with parents of his students.

**6. TASK**

- Define the goal and measurable outcomes i.e. to have more than 50% of parents spending one day in class per term.
- Consider the current activities you have in place to encourage parent-partnerships within your institution.
- Complete a SWOT analysis, identifying your current strengths and realistically appraising your current weaknesses. This can only be done involving other teachers, pupils and parents.
- From the current analysis identify factors which could be improved.
- Identify opportunities that could be created.
- Put a plan and set of measures in place.

**7. THE INTUITION IDENTIFIED THE FOLLOWING OBJECTIVES:**

- To improve parent partnership by encouraging parents to visit the school and become active members of the community.
- Outcome to have more than 50% of parents spending one day in class per term.

Currently, the intuition holds an open day once each year. It uses this as a way to encourage parents to visit the school and engage with intuition staff. The following is the initial SWOT Analysis for intuition.

<p style="text-align: center;"><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Highly-skilled teachers.</li> <li>• History of successful open day events</li> <li>• Intuition has a strong ethos of openness, sharing and commitment to increasing parental confidence</li> <li>• Parents wanting to get involved</li> <li>• PTA willing to participate</li> </ul>	<p style="text-align: center;"><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Teachers not available to meet parents often enough</li> <li>• Current open days events not increasing voluntary activity</li> <li>• Not enough staff time to plan more events</li> <li>• Staff not clear of their role in the parent relationship</li> <li>• Narrow focus on open events not partnership activities</li> <li>• Curriculum too stretched for additional activity</li> </ul>
<p style="text-align: center;"><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Active volunteer committee willing to plan and organize events</li> <li>• Students active in the school’s Pupil Participation Project can be asked for their opinions and suggestions.</li> <li>• Head Teacher is willing flex curriculum to free up teacher time</li> <li>• Use parents to contribute to curriculum delivery</li> </ul>	<p style="text-align: center;"><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Confidentiality is at risk</li> <li>• Students coercion to do things they do not wish</li> </ul>

**8. E-Learning SWOT Analysis**

Strengths	Ability to offer education to large numbers of students from distant locations
	Lower cost(travel, instructor fees)
	Shorter courses mean less time commitment necessary for corporate students
	Lower cost means education is more accessible to people with limited financial recourses
	Use best instructors making best courses available to all
Weaknesses	Larger commitment to technology needed from universities, corporations offering e-learning courses
	Lake of face to face contact with students
	Current technology does not support low-cost,high-bandwidth,synchronous student teacher interaction
Opportunities	Ability to reach the world instantaneously with the latest news and technologies
	Ability to train sales force and employees about product advancements
	Access to courses from a variety of universities
	Decrease long-term education expenses by shifting learning programs to the Web
Threats	Lack of student interest
	Equipment and technology requirements restrict adoption of e-learning
	Lackof human interaction deters the learning process
	Most corporate instructor-led course last 4-5 days, comprehensive coverage of some topics could be lost in a shorter e-course

**CONCLUSION**

Information and Communication Technologies (ICTs) are often used as an "add-on" in many classrooms and in many lesson plans. as, many teachers find that interesting and well-planned tasks, projects, and resources provide a key to harnessing the educational potential of digital resources, Internet communications and interactive multimedia to engage the interest, interaction, and knowledge construction of young learners.SWOT analysis imposes inquiry approach in order to better link relevant new theories or models of learning with practice and to build upon related learner-centered strategies for integrating ICT resources and tools, and to incorporate interdependent functions of learning as information access, communication, and applied interactions.ICT-supported learning activity design provides an inquiry based approach to learning creating a long term impression in the brain. In fact it is part of a loop of professional learning that incorporates a number of variables including competence, theories of teaching, subject perceptions and knowledge as well as levels of professional satisfaction resulting in improved learning outcomes or increased classroom interaction and motivation.In addition to the information about a particular concept, SWOT analysis enables promotion of the following aspect in the whole process of learning.

- *Timeliness*: the information available is up-to-date;
- *Emphasis*: highlighting particular aspects of a display or idea
- *Multimodality*: the facility to combine visual, aural, and textual display
- *Accuracy*: items are constructed with greater precision that is realistic manually
- *List*: the facility to set out a choice of resources or actions
- *Template*: the provision of a standard outline structure for individuals to add their own ideas
- *Acquisition*: the entry of data into the ICT device and storage for subsequent processing and display.
- *Dynamism*: processes an representations can be shown in motion
- *Simultaneity*: different processes or forms of display can be shown together
- *Library*: data can stored in an organized way for easy retrieval
- *Linkage*: Sets of information can be linked for easy access or processing

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**QUALITY OF EDUCATION IN CHILD LABOUR AND CHILD PROTECTION**

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**ABSTRACT**

*Children are the greatest gift to humanity. Childhood is an important and impressionable stage of human development as it holds the potential to the future development of the society. Children, who brought up in an environment, which is conducive to their intellectual, physical and social health, grow up to be responsible and productive members of society. One of the most wonder why child labour is so rampant claims for proper protection of child rights .It is because of the inferior quality of education that the poverty and community does not feel attracted to send their children to school? Or it is because of insensitive / non responsible nature of social protection system that in fingered upon in Andhra Pradesh. One of the disconcerting aspects of child labor is that children are sent to work at the expense of education. Child labor restricts the right of children to access and benefit from education and denies the fundamental opportunity to attend school. Or because of parents and communities ignorance that the children are allowed for labour either in agriculture land or in hotels or in industries. Under extreme economic distress, children are forced to forego educational opportunities and take up jobs which are mostly exploitative as they are usually underpaid and engaged in hazardous conditions. Child labor, thus, prejudices children's education and adversely affects their health and safety. Objectives: 1.To eradicate the child labour, about profit in the Education. 2. To prevent child from slave in rural/ urban areas.*

*Keywords: Children, Child labor, Quality education, slave*

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**INTRODUCTION**

Children are the greatest gift to humanity. Childhood is an important and impressionable stage of human development as it holds the potential to the future development of the society. Child labor restricts the right of children to access and benefit from education and denies the fundamental opportunity to attend school. The recent studies on the status of child rights in India are adequate proof of the fact that despite an ever-growing emphasis by the national and international agencies, there is a paucity of new insights and ideas on the part of the state and society to contextualise an ever-encouraging scenario regarding the issues of child rights. The phenomenon 'child rights, it seems in itself is presently in a stage of theoretical discourse in India.

**The general objectives of the study**

- a) Prevail age parental attitudes, perception and motivation for quality of education for children of 6-14 years of age;
- b) Child protection structures in place addressing child rights and quality education as well as the child labour in the study area;
- c) Aspects of access to service providers and quality education for vulnerable families;
- d) Determining the magnitude of problems relating to the dropouts and children out-of-schools and;
- e) Status and profile of functioning of schools, their governing and promotional structures, work strategies and ethics;
- f) To examine the child labor development programs and acts to improve the Child labour.
- g) Identify key education strategies that can inform policy and action to address child labour in India.

The part also seeks to highlight the key dimensions relating to the prevailing knowledge and attitudes of the families and communities with respect to the protective measures, against violence, exploitation and abuse of children. The last part has critically analyzed the status of the child rights in the area under study in the light of the data described in the various sections of the paper.

**METHODOLOGY OF THE STUDY**

For the study, we have selected a total of seven blocks in three different districts with the help of a purposive sample method. A priority in selection was given to those that were predominantly inhabited by SCs, STs and other Backward Classes (OBCs). A sample of 20 villages was identified within these blocks by selecting 5 percent of the total number of villages from each of the selected development block with purposive sampling method. In this selection too, the focus remained on the village populated by marginalised section. Finally, 20 households were selected for intensive study in each of the selected villages through systematic circular random sampling.

**Socio-Economic Profile of Respondents**

The analysis of socio-economic profile of respondents point out a somewhat gloomy picture, which may not be very encouraging from the perspective of promotion and protection of child rights. The data on respondent’s occupational status, income, land holding and type of house, literacy, etc., are the trendsetters on this issue. For example, out of the study sample of 140 respondents, spreading into three project districts, a large number of them have to fall back only on the wage income with 37.41 percent of Krishna, 45.48 percent of West Godavari and 50 percent of East Godavari respondents coming from labour background of occupational status. Further, the traditional occupation low-level factor is also intrinsically involved in the case of artisan groups among the study sample.

**Status of Quality Education**

The paper presents the status of different committees and associations promoting quality education in the three districts under study. It examines the awareness level of people on these committees and associations. Besides, it also gives the status of transition rates of boys and girls from primary to upper primary level and to secondary level education.

**Village Education Committee**

Universalisation of elementary education has been identified as one the most important determinants of development in India. The fact that Indian population shows disparity on socio-economic front makes it imperative to chalk out measures that ensure equal access to education for all children. It is well identified that 100 percent coverage of children by any educational scheme is not possible without the zeal and active involvement of parents and communities.

**Parent – Teacher Association (PTA)**

With the objective of ensuring community participation in school management, PTA includes government has specially devised a formal institutional body where all the teachers and parents of all the children will jointly hold the responsibility of various aspects of quality education. Parents of all the enrolled children and all the teachers are members of this association. One seat among President or Vice President is reserved for SC/ST or OBC community and especially for women candidate also.

Awareness on Actives of PTA			
Awareness on actives do PTA	Krishna District	East Godavari District	West Godavari District
PTA formed in the village	14(2.59)	26(7.22)	31(6.20)
PTA not formed in the village	156(28.89)	62(17.22)	64(12.80)
people are not aware about PTA	370(68.52)	272(75.56)	405(81.00)
No. of respondents as members in PTA	8(1.48)	7(1.94)	6(1.2)
Total	504(100)	360(100)	500(100)

**Enrolment and Attendance**

In our study, we came across around 70 percent households collectively from the three districts of Krishna, East and West Godavari that have children falling in the age group of 6-14 years. District wise data reveal that Krishna has 77.72 percent, East Godavari has 66.94 percent and West Godavari has 64.6 percent children in the above mentioned age group. This implies that if Right to Education is properly implemented in letter and spirit, then a substantial population will be benefited by it.

Further, we have found how many of these household have actually enrolled their children in school. The study says that 93.48 per cent households collectively from the three districts have enrolled their children in school; district-wise data break-up show that 95.92 percent in Krishna, 92.12 percent in East Godavari and 91.33 percent in West Godavari have got their 6-14 years old children enrolled in school.

Enrolment of children (age from 6-14 years)			
Particulars	Krishna District	East Godavari District	West Godavari District
Respondents having children (6-14years)	417(77.22)	241(66.94)	323(64.60)
Respondents not having children (6-14years)	123(22.88)	119(33.06)	177(35.40)
<b>Total</b>	<b>540(100)</b>	<b>360(100)</b>	<b>500(100)</b>
Respondents enroll their children (6-14years) in schools	400(95.92)	222(92.12)	295(91.33)
Respondents not enroll their children (6-14years) in schools	17(4.08)	19(7.86)	28(8.77)
<b>Total</b>	<b>417(100)</b>	<b>241(100)</b>	<b>323(100)</b>

**RIGHT TO QUALITY EDUCATION**

Within the Right to Education, there is a need to focus on 'quality' education that is currently missing. We have a right to enrollment in India but not a right to education because no one is looking at teacher availability, actual transfer of information, and actual learning. Reduced budget allocations in the service sector, especially ICDS, midday meals, and food security is already an existing area of concern.

It is important to understand how we are defining quality education as it means different things to different people and we must not reduce it to merely 'joyful learning', particularly in the context of marginalized children as they are most vulnerable to child labour. In order for education to be quality education, it is important that we see how education is empowering children, how it is being able to cultivate the voices and experiences of children in school as children's experiences are often neglected and not given any dignity. Children must be given spaces and opportunities to construct knowledge and bring out their creativity so that their potential is demonstrated to their parents and in turn, parents make the choice to support and promote their child's schooling. This is equally important to help teachers to better understand the different perspectives and contexts that the students come from.

We must question if we really believe that quality education can tackle child labour. It will only solve the problem if it leads to a change in income levels, as we can see when we talk about the last quintile. Using such a broad approach, we may end up discussing the same situation a few years down the line. Participants of today's consultation are not looking at education only for the sake of it, it is for the purpose of strengthening the lives of child labourers and their families and we must ensure that happens. People attitude towards the problem of child labour plays important role in reducing its level.

**CONCLUSION**

Child rights cover the whole series of activities that ensure a respectful and dignified life to them. Children from well to do families enjoy all determination of standard life where as those from marginalized, vulnerable section of society often fall prey to one or the other form of exploitation and abuse. In this nature of study and the time – bounded field level survey a deeper of exploitation towards a profound understanding of the nexus between the classes and children's right at the micro level. Each child should undergo compulsory education up to 14 years and prevent child labour.

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**AN ANALYSIS OF VARIOUS TRAINING EVALUATION MODELS**

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**ABSTRACT**

*A profound training programme is a bridge that helps Organization employees to enhance and develop their skill sets and perform better in their task. It actually help in meeting the gap between skills possess and required to perform the job. Training is an important investment in terms of time, energy and money by Organization for the upliftment of the employee's so that they can meet the challenges of global competition. Therefore it become very essential for an Organization to know whether their investment is being spent effectively or not, this requires continuous evaluation of training interventions. Evaluation of training intervention means valuation of the impact of training on participants. This is descriptive paper comes under the category of general review of various evaluation models. Finally in conclusive remark paper suggests the most widely use training evaluation model in present scenario.*

*Keywords: Evaluation, Evaluation Models, Training, Organization, Four Level Evaluation Model.*

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**1. INTRODUCTION**

In order to thrive in today competitive world KSA i.e. knowledge, Skill & Attitude are three most important aspect to look into. Learning new skills, gaining new knowledge or attitude is an ongoing process, the only aspect that change in the process of learning is its mode and duration i.e. from school to college and once becoming part of corporate world training become one of the most prominent mode of learning. Indeed training enhance and develop the skills sets and knowledge, but requires lot of investment in terms of time, money and energy. It's a critical investment in a strategy that leads to internal promotion, succession planning and employees development. It's an investment in employees' productivity and retention by providing for career progression and employee's job satisfaction over the long time (Bowes, 2008). To monitor such investment is very important from organization point of view. Increasing expenditure on training and development raise inquisitiveness to know the return on these critical investments. Human resource department and Trainers are continuously facing the pressure of justifying the intervention investment through results. So it is becoming important to evaluate the training session properly and demonstrating as well as communicating the worthwhile contribution of training efforts to the management.

**2. TRAINING EVALUATION: A COMPREHENSIVE APPROACH**

Evaluation is a process of determining the value, worth, and significance of something against set standards Evaluation is considered as an important element in the designing of training programs because information gather in the process of evaluation help trainer as well as Organization to modify and develop the training session so that it becomes more constructive and add more value. "Evaluation is to gather, examine and interpret the information gained about any aspect of a program of education or training for providing a judgment on its effectiveness and efficiency and any other outcomes it may have" (ELLINGTON et al. 1993). The process of examining the effectiveness of any training intervention is called training evaluation. It is one of the most important aspects of training interventions. Training evaluation check following aspects, first it helps to determine whether training has had the desired effect, secondly do participants able to implement what they have learned. All training programme should be evaluated not just to justify the investments but evaluation should be done to bring improvement and modification in the training session so that it becomes more impactful. Majorly good training interventions initiated with identifying the TNA i.e training need analysis and ends with evaluation process (Gopal, 2009). Checking effectiveness, assessing whether the defined objective is achieved or not is what evaluation is. Training effectiveness refers to bring in advantage by a training session to the Organization and its employees, it can be the enhancement of skills, knowledge, and attitude that will ultimately help an Organization to become competent in this global competition scenario. Though, it is considered a tough task to measure the effectiveness of training session because of long duration involved to figure out its impact on trainees and Organization as well as it is intangible in nature (Prasad, 2005). Evaluation is the comparison of observe value with the set standard, which will ultimately provide judgment about the quality of training session (Holli and Colabrese 1998). Training evaluation is a systematic process of collecting all necessary information about the effect of a session that will help in bringing improvement and modification if requires in the programme so that better outcome can be achieved. Training evaluation gives surety whether trainees are able to implement their learnings at their work places (Nagar, 2009). Current scenario of justifying

the outcome of training session made it necessary to have a well-planned and reliable evaluation process, which will ultimately make Organization continue its investment in training programmes. Although evaluation is considered as difficult to execute because it is tough to set measurable objectives and even tougher to gather useful information and interpret the outcome, still experts of training evaluation believe that evaluation is one of the most important process, it is not considered as another element to the training but incorporated within the training process (Kirkpatrick, 1998). Thus training evaluation cannot be ignored.

### **3. LITERATURE REVIEW**

Ramachandran (2010) did study on the effectiveness of training programme on different cadre of employees working in public sector. The study reveals effectiveness differed basis of demographic characters, education & experience.

Nagar (2009) Training budgets are growing, Organizations are using training to build required skills, study shows that effectiveness is based on duration, facilities, trainer, training aids, and infrastructure.

Saharan (2011) most Organization use feedback from employees to bring effectiveness in training session. To have a competitive edge and better chance of success training is used as a tool. The study shows that training is imparted to enhance the knowledge and skill sets of the employees.

Smith (1990) viewed that evaluation of management training courses is a subject much discussed but, apparently carried out. The study finds that there is too much emphasize on providing an objective evaluation report and too little focus on subjective and peculiar issues which do not necessarily fit the frame.

Blanchard et al. (2000) A survey was conducted in Canada both at management and non-management level. Survey data reflect that only one-fifth Organization of Canada evaluates training session.

Hashim (2001) made the point that training evaluation hard to define as a concept, and even harder when it comes to practice. Bringing evaluation in practice has received a lot of criticism. This criticism is largely due to the unsystematic, informal and ad-hoc evaluation that has been conducted by training institution.

Griffin (2010) finds that there is a disparity between organizations desires to evaluate training and the extent and effectiveness of actual evaluation. The author has proposed a productivity-based framework to focus data collection and the utilization of a metric to present results.

Ogundeji (1991) Observed increasing impotence of evaluation and considering it as a powerful tool to enhance the effectiveness of training. The major role of training evaluation is quality ascription, quality assessment and quality control.

Iyer, Pardiwalla & Bathia (2009) briefly explore the various training evaluation method to understand the requirement of training evaluation. Learned concluded that there are different method chalked out to evaluate a learning session, still the concept is considered as underdeveloped. The concept needs a well-framed evaluation model so that process of justifying investment as well as bringing required modification in the training session can be done.

### **4. TRAINING EVALUATION: PURPOSE, NEED AND BENEFITS**

Evaluation of a training session help an organization to meet its different goals, evaluation helps in having an effective training. one of the primary aim of evaluation is to improve training sessions by determining the required modification and improvement so that outcome can be matched with set standards.

#### **Other purposes of training evaluation are as follows**

- To determine whether the objectives set by organization are being met by training session.
- To justify the cost involved in the training session.
- To determine right audience for future programme.
- To collect the information for bringing effectiveness in future sessions.
- To define the efficiency of the different components of training session (e.g. Course & contents, training aids, facilities and environment, programme schedule, presentation style, Trainer etc.)
- To determine the amount of learning applied at the job by the trainees.
- To determine if TNA i.e. training need analysis met.
- Feedback, Control, Research & Intervention are the four main purpose of evaluation identified by Bramley and Newby (1984).

**KIRKPATRICK IDENTIFIES THREE REASONS TO HAVE AN EVALUATION**

- To justify the cost of investment by showing the contribution of training session towards the organization goal.
- To get information for bringing in improvement and modifications in future training sessions.
- To take decision for continue or discontinue particular training session.
- Academics and Training practitioners alike agreed that training evaluation provide number of benefits. These are some benefits of evaluation:
  - Evaluation determines whether learning objectives were met and till what extend and identify scope of improvement in a particular training session so that better results can be achieved.
  - Evaluation demonstrates the benefits gained by organization as well as its employees due to training session, it help in figuring out the ROI from the training programme.
  - Trainers get their feedback that will help them to enhance their skills and knowledge to deliver better.
  - Evaluation identify what part of learning are being used on the job? And to what extend?
  - Evaluation helps in determining the pace and sequence for training programmes.
  - Evaluation even provide feedback to the participants that will help them to analyze enhancement in their knowledge, skill and attitude.
  - Evaluation can even help in reinforcing learning, with the help of a test or performance assessment trainer or organization identify content retention which will help in designing of future session.

Organizations like IBM, Motorola found out to have a well-defined evaluation mechanism. Maximum organizations conduct training programs but do not give attention to the evaluation process. Evaluation helps to ensure that training help in meeting the competency gaps.so evaluation should be considered as an important aspect of the training process.

**5. MODELS FOR TRAINING EVALUATION**

Different models of training evaluation are chalked by different learned, still the concept of evaluation is considered as underdeveloped. Evaluation is considered as an expense that can be ill afforded. Still scholars have tried to come up with effective evaluation mechanism that can actually help in evaluating the training programme and justifying the investments made in terms of time, energy and money. Some famous models of training evaluation are as CIPP Evaluation model by Daniel Stufflebeam and colleagues in the (1960s), CIRO approach by Warr, Bird & Rackson, (1970s), Phillip's Evaluation approach by Phillips (1996), Kaufman's five-level Evaluation,(1992), Kirkpatrick Model (1959),out of which Kirkpatrick did pioneering work in the field and introduce the well know model " Four Level Evaluation Model" which is still very popular in training industry.

**HERE IS EXPLANATION OF FEW POPULAR MODELS****A. Kirkpatrick Model**

This training evaluation model is popularly known as "The Kirkpatrick Four-Level Training Evaluation Model". Model was develop by Donald Kirkpatrick in 1959, since than gone through several modification and updating. This models talks about four stages or elements use to measure effectiveness of a training programme these are reaction; learning; behavior and results. First stage i.e. Reaction measure or check how participants feel after attending the training session. At second stage i.e. learning would assess the learning of trainees from the training session. Third stage talks about evaluating the change in job behavior that reflects after attending training session. The fourth and final stage i.e. the results would evaluate the outcome of a particular training session. According to a survey by the American Society for training and development (ASTD), the Kirkpatrick four-level evaluation approaches is still the most commonly used evaluation framework among Benchmarking Forum Companies (Bassi & Cheney, 1997). The strong point of the Kirkpatrick evaluation approach is the focus on behavioral outcomes of the learners involved in the training (Mann & Robertson, 1996).

**An in-depth look at the four levels of the Kirkpatrick Model is as follows****Level-1: Evaluation – Reaction****How do participants feel about the training session? Did the participants like the programme?**

Following type of questions get answered at the first stage of Kirkpatrick model i.e. Evaluating Reactions. At this level trainee's perception towards the course is measured. In simple terms this level evaluates the reaction

of individuals is identified by asking questions related to the training session. Interviews, questionnaires, evaluation sheets and participants comment during the session are some likely methodologies use to gather information about the participants reaction. Evaluation sheet should be design in such a way that it will allow results to be easily tabulate and can be used to bring required changes if any in future training sessions.

It is recommended that each session needs to be assessed at this level because it helps to identify the area of improvement if any, and even participants reaction help to decide for continuing or discontinuing a particular programme. Even though an optimistic reaction does not ensure learning, an unfavorable one definitely makes it less likely that the user will pay attention to the training.

**Level-2: Evaluation – Learning**

**What have participants learned? What was not learned? What new skills/ knowledge/ attitudes were gained?**

At this level learning of participants is gauge. This is the second level of Kirkpatrick model that is more challenging and time-consuming as compared to level one. Methodologies involved at this stage are pre and post testing, observations, interviews, and self-assessment. Pre and post-test help in analyzing the learning due to the training session. Kirkpatrick emphasizes that test must be accurate and cover all the topics that were part of course content. Some examples of the tools and methods that can be used at level two are: comparison with control group, written test, observation etc. this level requires time.

**Level-3: Evaluation – Behavior**

**What change in the behaviour of trainees is noticed? Is learning being applied by the trainees?**

This levels talks about the extent to which trainers implement their learning’s. Analysis at this level starts after 3-6 months of training. Lot of factors do work or involved at this level that can affect the outcome. This is the level where the trainers control over the group is zero. Analysis at this stage is done at their work place, role of supervisor, colleagues do affect the results. Changes can be figured out by observing application of knowledge, skills learned during training session at job. This level is more challenging compare to first two because it is usually tuff to anticipate when trainee will apply his learning and till what level. Observation and interview are two assessment techniques that can be used at this level.

**Level-4: Evaluation – Results**

**What is the final outcome of Training? What are the final results of the training efforts?**

This level analyzes impact of the training intervention on the organization. The end result is what actually matters. Kirkpatrick observed that objective of training session starts in terms of desired results. The complete success of training session is identified through the end results. This is the toughness level not in terms of application but defining and justifying the outcome is at time become challenging and complicated. Observation, yearly/quarterly review, performance analysis, control group etc. are few methodologies that can be employed at this level.

**Here are the some limitations of Kirkpatrick Model**

- Entire focus of this model is on training session only; this model completely ignores effect of individual, organization, its culture as well as contextual influences.
- Model work on the fact that each level of this model assumes that next level will provide more informative data than last level, i.e. according to model level 4 will provide the most useful information about the training effectiveness.
- Low Incorporation of Level 3 and Level 4 Evaluation. The results of an American Society of Training and Development (ASTD) survey presented in 2008 indicates that 91% of organizations evaluate at Level 1, 54% at Level 2, 23% at Level 3 and 8% at Level 4. Reasons for the low level of implementation of Level 3 and Level 4 may stem from the fact that the measurement of behavior change is less easy to quantify and interpret than reactions and learning and the results across an entire organization.

**Kirkpatrick’s Four Levels of Evaluation at a glance**

Level	Measures	Key Question Addressed	Methodologies or Indicators
1: Reaction	Fulfilment Satisfaction	What was the participants' reaction to the program?	program evaluation sheets often called Smile Sheets or Happy Sheets interviews questionnaires participant comments

2: Learning	Knowledge	What did the participants learn?	pre/post testing observations interviews self-assessment
3: Behaviours	Transfer of Learning	Did the participants' learning impact their behaviour?	testing observation
4: Results	Impact Outcome	Did participants' behaviour changes affect the organization?	Indicators can include: reduced costs increased productivity decreased employee turnover

**B. CIRO Model**

Warr, Bird and Rackham develop CIRO Model in 1970. They mention it first time in their book "Evaluation of Management Training". CIRO stands for context, input, reaction and output. □ C- Context or atmosphere within which the training took place □ I- Inputs to the training event □ R- Reactions to the training event □ O- Outcomes. CIRO model covers all aspects of training cycle, C-Context evaluations help in getting the idea as what method best fit with the objective of training. Designing and scheduling is covered in input evaluation. Determining the correctness and accurateness of the inputs is vital for the success of the training initiative. Reactions Evaluation will check and evaluate the reaction of participants on the training session so that accordingly changes can be implemented. Outcome Evaluation will keep a check on the final results achieved at the end of training session i.e. to compare what was planned and how much is achieved in compare to set objective. CIRO model focus on measuring both the aspects i.e. before and after the training session, this is the only key difference between CIRO and Kirkpatrick's models. This model is considered more suitable to evaluate top and middle level management training programmes rather than lower level management programme as this model do talk about evaluating behavior.

**C. Phillip's Evaluation**

J. J. Philips in 1996 suggested to add another level i.e. ROI (Return on investment) to Kirkpatrick four level of evaluation model. This was suggested due to the fact that four level model only focus on evaluating effectiveness of training session, it doesn't talk about monetary benefits. As in past few decade justifying the cost value become challenging for training professionals. According to James and Roffe (2000), ROI Model translate Kirkpatrick's fourth level data i.e. results into monetary values. It only give the monetary worth of benefits received due to particular training session with the help of this formula:

$$ROI \% = (Revenue - Total Costs) / Total Costs * 100$$

Almost all other training evaluation models focus on measuring satisfaction only Philips ROI model talks about monetary aspects. Very few Organization conduct evaluations at the ROI level because ROI is considered as a difficult and expensive process.

**D. CIPP Evaluation model**

**Context, Input, Process and Product** are four parameters on which CIPP Evaluation Models focus on. CIPP Model of evaluation was develop by Daniel Stufflebeam and colleagues in the 1960s. This framework develop with aim of linking evaluation with programme decision-making. It is an attempt to make evaluation directly relevant to decision making.

Context evaluation: This is to determine the extent to which objective of training session match with organization need. It involves evaluation of training needs analysis and formulating objectives of the session in the light of these needs.

Input Evaluation: Assessment of action plan this level is to measure the extent to which session strategies, procedures, and activities support objectives identified. Input evaluation is to examination of the planned content of the session.

Process Evaluation: It is considered as a critical aspect. Process Evaluation involves evaluation of preparation of reaction sheets, rating scales and analysis of relevant records (Prasad, 2005). Process evaluation is a continual assessment of the implementation of the action plan that has been developed by organization. It is an ongoing and systematic monitoring of the programme. A process evaluation provides information that can be used to guide the implementation of programme strategies, procedures and activities as well as a means to identify successes and failures. The objectives of process evaluation are • to provide feedback to organization and their employees about the extent to which the activities are on schedule are being carried out as planned and using

time and resources in an efficient manner; • to provide guidance for modifying or explicating the programmes action plan as needed, particularly since not all aspects of the plan can be anticipated or planned in advance; • to assess periodically the extent to which programmes personnel are performing their rules and carting out their responsibilities; • to provide an extension record of the programmes, how it was implemented and how it compares to what was intended.

Product evaluation: It involves measuring and interpreting the attainment of training and development objectives. In other words it can be said that the purpose of product evaluation is to measure, interpret and judge the extent to which an organization's improvement efforts have achieved their short term and long term goals. It also examines both intended and unintended consequences of improvement efforts.

#### **E. Kaufman's five-level Evaluation**

In year 1995 Kaufman, Keller and Watkins drafted Kaufman's five-level evaluation model. This evaluation framework connects performance to expectations. Kaufman model is actually reaction to famous Kirkpatrick model. Four level model evaluate type of impact on trainees while Kaufman's model evaluate impact on different audience. The model consist of five different levels as follows:

##### **Level-1: Resources and processes**

This level is divided into two levels, 1a and 1b. Level 1a talks about resources. It focus on quality of material that is required in a training session. Talking about Level 1b, it lens on processes as in how efficient are they? Is the session able to satisfy the participants?

This level looks into learner satisfaction as well as even focuses on organizational factors that impact the learning from a particular session.

##### **Level-2: Acquisition**

This level is categories as "Micro Level" as focus is on individual and small group payoffs. At this level competency and mastery of group or individual who attained the training session is evaluated.

##### **Level-3: Application**

This level is also categories under "Micro Level" where impact is measured. The focus is to evaluate whether learning from the training session is been applied and till what level. How much and how well knowledge is implemented on job is what monitored at this level.

##### **Level-4: Organizational payoffs**

This level is considered as "Macro Level" where the overall performance and ROI at organization level is measured. This level answer the question: what benefits organization received? In simple language what benefit received by an organization in whole through proposed training session.

##### **Level-5: Societal contributions**

This level is final level and considered as "Mega Level" "this level is to answer the following questions: What contribution organization is giving to society? Is organization responsive to society needs? Responsiveness, possible consequences and payoffs are assessed to determine the success of implementing the proposed training program.

#### **6. CONCLUSIONS**

Training Evaluation is an important aspect, But still an underdeveloped develop concept. Lot of scholars have contribute to this field by suggesting different models, few popular model have been discussed in this paper earlier. Still this concept required a sound and efficient model to develop, one of the main reason is that all the framed model are descriptive and subjective in nature. Factor and indicator for measuring the efficiency is not well defined and explained. Future studies have shown that among all discussed models Kirkpatrick model is widely used and most popular.

Future outcome of the studies shows that there are enough model for training evaluation. Now the focus should be to modify or chalk out a model that clear state the indicators of efficiency, explained properly about each issue so that evaluation of training session can be correctly carried out with greater effectiveness.

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**UNDERSTANDING PE: AN EVIDENCE FROM THAILAND'S VALUE INVESTMENT**

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**ABSTRACT**

*Present study focuses on the concept of value investing where stock screening is done with the use of PE, PEG and PERG ratios. PE is the widely used Price to Earnings ratio whereas PEG is calculated after incorporating the growth component in traditional Price Earning (PE) ratio. PERG ratio is the ratio that comes after adjusting risk component to PEG ratio. Present study is based on the hypotheses that the stocks that have low PE ratio, Low PEG ratio and Low PERG ratios can generate much better returns than those stocks which have higher PE, PEG and PERG ratios than their market averages. Financial data ranges from 2006 to 2016 is extracted from The Securities Exchange of Thailand and were used to support the hypotheses. It is found through analysis that firms that have low PE, PEG and PERG ratios performed better than market average. Standard deviation of the returns and beta coefficients are used as Proxies for Risk to calculate PERG ratio. It is found that standard deviation, when used as a proxy for risk associated with low PERG shows better performance if compared with using beta coefficients. In overall analysis, PE proved to be the best screener that provide much higher returns during the period under question.*

*Keywords: PE, PEG, PERG, Value Investing*

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**INTRODUCTION**

The concept of Value Investing is a well recognized and accepted widely amongst the value investor community. It is based on and commonly uses the fundamental side of investing and uses a rational analysis of firms that focuses on the soundness of the business in which the value investor is interested. Significant weight is provided to value investing that is through the rational use of various key financial ratios and its proper analysis of the current business.

Amongst others, the popularity of Price to Earnings(PE) ratio is very high whereby value investor gives suitable considerations for a stock with low PE ratio, that reflects the considerations paid towards the fair value approach. A low PE compare to the market average suggests that the firms share is available below its fair value when compared to earnings per share. Though the stock selection which is based on low PE approach has been questioned a number of times as it does not incorporate the growth opportunity. And this leads to the analytical approach which can incorporate the growth in the analysis of business and leads to Price to Earnings Growth ratio. Therefore, the use of PEG ratio is useful for value investors and also for growth investors as it combines both investment concepts as it pays altogether equal attention the stock price compare with profit and simultaneously the growth rate of profit.

But there is shortfall that is observed with the use of PE and PEG ratio that these two ratios do not consider another important component of investor' concern i.e. risk. Every time investors make investment, the consequent return faces some form of risk in it which is totally overlooked by PE and PEG ratios. There are very little studies and evidences available that can support the hypothesis that Risk adjusted PE can generate superior returns over simple Price/Earnings Ratio and Price/Earnings ratio adjusted against growth factor. Although, there are several studies that shows the benefits of using Price/Earnings ratio and Price/Earnings ratio adjusted against growth. None of the researcher paid any attention using PE ratio adjusted against risk for selecting stocks. It is the aim of this paper to combine both growth and risk into the Price/Earnings ratio and to study a new stock screening ratio, PERG, whether in can be considered as a better screener for performance of stock and portfolio. This study also examines which proxy for risk that Standard Deviation of stock return or the beta coefficient explained by Modern Portfolio theory, could give better results if employed in determining PERG.

In the next section, literature related to the present study are reviewed after which research methodology and data used in this paper are discussed then the empirical results drawn are presented for analysis. Lastly, this paper discusses the conclusions, implications and limitations all together with suggestions.

**LITERATURE REVIEW**

Valuation models, such as the Gordon Growth model and the Ohlson and Jeuttner-Nauroth (OJ) model, suggest that the P/E ratio is a function of expected earnings growth and expected rate of return. Furthermore, it is predicted by the theories expected growth and P/E ratio is positively correlated and negatively correlated with expected rate of return. It is explained by some recent studies that P/E ratio is better explained by forecasted

growth than realized growth (Beaver & Morse, 1978; Zarowin, 1990; Thomas & Zhang, 2006). Thomas and Zhang (2006) found that replacing the trailing P/E ratio with the forward P/E ratio yields results that are more consistent with the theoretical predictions.

Recent researches in the years have found that the theoretical concept of value premium exist is practical world also, both in developed as well as in developing markets. The strategy of Value investing outperforms growth strategy across countries. A number of studies have explored the situation where the price of stocks traded in the market was not consistent with fundamental information, and studied the causes of this irregularity. These include researches by Schatzberg and Vora, Robichek and Bogue, Reinganum and Fama and French. Most of the studies reported that investing in stocks which had low value of certain financial ratios such as price to earnings, price to book value, and return on equity, yielded better returns than the market average. Fama and French and Petkova and Zhang reported that value stocks had higher risk than average stocks and because of the higher risk premium, their prices were thus lower.

Prior literature has examined how the P/E ratio can be used to estimate the cost of equity capital (Easton, 2004), to explain stock prices (Liu et al., 2002, Schreiner & Spremann, 2007; Kim & Ritter, 1999), and to predict future earnings (Ou & Penman, 1989; Fairfield, 1994; Penman, 1996; Chan et al., 2003; Wu, 2013). It is a well-known phenomenon that the P/E ratio is related with the value/glamour anomaly (Basu, 1977, 1978; Jaffe et al., 1989). Prior studies show that an investment strategy which longs low P/E stocks and shorts high P/E stocks yields significant positive returns. In the investment community, the P/E ratio is also heavily used by financial analysts to justify their stock recommendations. Bradshaw (2002) finds that 76% of the sell-side analysts cited the P/E ratio as a justification for their stock recommendations and French (1988) found the mean reversion in returns on stocks with 3-5 years investment horizons, which implied that a long period of low return stocks tended to reverse and generate above-average returns in the

Future. Campbell et al (1997) found 12% of the variance in the NYSE daily stock price index could be predicted based on the previous day's return. Banz (1981) and Reinganum (1981) observed that small capitalization firms on the New York Stock Exchange gained substantial high returns than fair value predicted by CAPM. Banz (1981) defined the phenomenon of small firm usually having higher average returns than larger firms as the "Small Firm Effect". Elfakhani and Bishara (1991) found the evidence in Canadian stock market that shows an inverse relationship between risk-adjusted excess returns and firm size. In UK, Dimson and Marsh (1986) found the annual returns on small stocks exceeded large stocks by 6% per annum over 1955-1984. Chan et al. (1991) reported a 5% small firm premium in Japanese stocks markets between 1971 and 1988. Roll (1983) hypothesized that US investors might sell small cap stocks by the end of the year since small cap stocks usually experience substantial short-term capital losses which could be used to offset investors' income tax. Banz (1981), Keim (1983), Reinganum (1983), Blume and Robert (1983), Ritter and Chopra (1989), Leleux et al. (1995) demonstrated it would be appropriate to refer the earlier finding as "Small Firm January Effect".

Due to the conflict of perspectives on price and growth opportunity between value stocks and growth stocks the PEG ratio became more widely discussed. However, academic work on PEG ratio was not much available. Holt conducted a study on returns from growth stocks selected based on PE ratio as compared to other securities; while Malkiel proposed methods for growth stock valuation as compared to non-growth stocks. Easton presented a model for assessing expected profitability and growth of returns employing PEG-based ranking, and found that the return being estimated correlated significantly with the level of the PEG ratio.

In Thailand, studies of value investment strategies have been limited. Sareewiwatthanastudied the stock selection methodology for investing in the Stock Exchange of Thailand during 1996-2010 based on basic financial ratios such as PE, PB, ROE, etc., and found that the investment strategy based on these ratios could generate returns which significantly exceeded the market average. Maneesilasan conducted a study on growth at a reasonable price (GARP) investment strategy by selecting stocks based on PEG ratio with the assumption that the rate of growth of profit generated by a company one year later was equal to the rate of change in average earnings per share of the last 3 years. The study result also showed that this strategy could generate higher returns than the market. Fama and French (1998) observed that firms in the lowest B/M class earned an average monthly return of 0.3%, whereas firms in the highest B/M class earned an average return of 1.83%. Beechey et al. (2000) summarized the previous evidences and concluded that on balance the hypothesis of "stock price follows a random walk" was at least approximately true, and thus no one could predict future returns by analysing past stocks price.

According to the mispricing view, there is an inverse relation between PE ratio and portfolio stock returns. Specifically, stocks with low PE ratios earn significantly higher returns than stocks with high PE ratios suggesting that an investor could earn higher returns by investing in low PE ratio portfolios. Basu (1977)

introduced this proposition and carried out empirical research to test the hypothesis. Using NYSE industrial firms in the period of September 1956 –August 1971, he found that low PE Ratio port-folios earn superior risk adjusted returns. Basu (1983) enhanced his previous research and found that high Earnings Price (low PE) stocks earned significantly greater risk adjusted returns even after controlling for firm size. Tseng (1988) and Jaffe *et al.* (1989) found similar results which show that low PE ratio portfolios have higher risk adjusted return than high PE ratio portfolios. Fama& French (1992) also found positive abnormal returns related with low PE stocks. Trevino & Robertson (2002) examine the relationship between current PE ratios and subsequent stock market average returns using US stock market data. Panyagometh compared equally weighted value stock portfolios with Mean-Variance portfolio optimization weighted value stock portfolios and market capitalization weighted value stock portfolios in the Thai stock market and concluded that the portfolio management theory could be applied together with value investing to yield higher returns. Sareewiwatthana, evaluated portfolio performances using five ratios—price to earnings per share, price to book value, return on equity, return on assets, and dividend yield. The results show that all tested portfolios outperformed the market; while that of low PE stocks yield the highest return, He also found that using single ratio, invested portfolio outperforms those of using two, three, and four ratios and screening tools.

**RESEARCH METHODOLOGY AND DATA ANALYSIS**

**a) Stock Valuation explained with the help of PE, PEG and PERG**

**a.1) Price to Earnings (PE) ratio is a ratio calculated by dividing Stock’s Market Price per share by Earnings Per Share (EPS) of the past year**

The Price to Earnings ratio tells us about the appropriate value of stock price when compared to Earning Per Share(EPS). If we assume that all stocks across the industry/sector are offering a particular level of fixed income than the most promising one will be that stock which has the lowest PE ratio. Worth to quote that PE ratio reflects the attractiveness of stock amongst the value investors at a future timeframe, it is how many times net profit is to the market price of share that an investor is willing to pay at any given moment of time. The following formula is applied to calculate the PE ratio:-

$$PE = Price / EPS$$

Where,

Price = Market Price Per Share

And EPS = Earnings Per Share.

**a.2) How to improve the efficiency of PE ratio by incorporating the Growth component—PEG ratio**

PEG ratio is an improvement over traditional PE ratio which is calculated by dividing PE by the long term growth rate. Thus the PEG ratio is dependent on the original PE and the growth component(Rate) of the stock for future profit. The formula for calculating PEG ratio is as follows:-

$$PEG = PE / g$$

Where,

PE = Price Earning Ratio

g = Annual Growth Rate

**a.3) How to improve the efficiency of PEG ratio—The concept of PERG ratio**

PERG is the most refined form which comes after adjusting risk component in the PEG ratio. The calculation of PERG is as under—

$$PERG = PE * R / g$$

$$= PEG * R$$

Where,

PE = Price to Earning ratio

g = Annual Growth Rate

R = Risk factor

**b. Research Plan**

Present research study used data of Thailand stocks extracted from The Stock Exchange of Thailand for the period 2006-2016. We assumed that the closing price at the end of month February each year is considered as the opening price of the year and the closing price of the end of the month February of the next year is used as the ending price of the year in order to come at proper calculations. EarningPer Share announcement within February of the following year was considered the figure for EPS for the purpose of calculating PE ratio. To calculate the Growth rate(g), paper considers the growth rate on Earnings Per Share of the last three years and is used as a proxy of the growth rate of future earnings of the underlying stock. Standard deviation of the returns of portfolios are calculated as per desired. Paper uses Bloomberg’s beta coefficient over years and averaged so that could be used as portfolio beta. Standard Deviation and Beta coefficients calculated in this manner are used for proxy for risk.

**c. Research Methodology**

The concept of value investing is applied in the overall paper and the ratios like PE, PEG and PERG are employed to screen the stock. The working hypothesis is based on the premise that investment based on low PE, low PEG and low PERG ratio can generate higher returns than those based on market average. Paper demonstrate the performance based on low PE, low PEG and low PERG. Present study used SD and beta as the proxy for the risk for the underlying stock/portfolio.

Four different portfolio patterns are developed for the study period:--

- A: Investment in Portfolio of 30 stocks with the lowest PE ratio which is > 0.
- B: Investment in Portfolio of 30 stocks with the lowest PEG ratio which is > 0.
- C: Investment in Portfolio of 30 stocks with the lowest PERG-SD ratio which is > 0.
- D: Investment in Portfolio of 30 stock with the lowest PERG- Beta which is > 0.

Further analysis is done through test to ascertain whether return generated through value investing in low PE, low PEG and low PERG are greater of lesser than the returns generated through index investing. Investments are evaluated for the period of one year and this process were evaluated at the end of February 2006-16. The annual returns so calculated for the portfolio are than compared to market index return of Thailand. For risk adjusted performance paper used Sharpe ratio and after that returns from four different portfolios are analyzed and compared with one another.

**DATA ANALYSIS AND PRESENTATION**

**1. PE ratio compared to Market Average**

In the below Table 1 that depicts when stock are selected on the basis of low PE ratio demonstrated much better returns compare to their market average in 10 of total 11 years. Furthermore, when Sharpe ratio is taken into account, the performance of portfolio returns shows a better performance in the low PE stocks than those of the overall market in 10 out of 11 years.

**Table-1: Portfolio Returns Based on Low PE compared to Market Returns**

Year	Low PE Ratio		% Market Return		Differential
	% Return	Sharpe Ratio	% Return	Sharpe Ratio	
2006	17.471%	0.614	-5.198%	-0.527	22.669%
2007	13.85%	0.527	30.317%	1.178	-16.467%
2008	-31.15%	-1.917	-51.39%	-1.304	20.24%
2009	191.25%	6.127	83.159%	3.128	108.091%
2010	73.71%	3.135	43.179%	2.369	30.531%
2011	61.23%	3.013	21.315%	0.726	39.915%
2012	73.25%	2.827	40.071%	1.926	33.233%
2013	81.19%	4.109	19.075%	0.624	62.115%
2014	86.25%	3.715	25.137%	0.828	61.113%
2015	103.81%	5.918	37.295%	1.547	66.515%
2016	83.15%	4.228	41.85%	1.915	41.3%
<b>Mean</b>	<b>68.546%</b>		<b>25.892%</b>		

**2. PEG Ratio compared to the Market average**

Table 2 shows the empirical results from the stock portfolio selected on the basis of low PEG shows better performance results when compared to market results. It can be seen that the low PEG stocks beat the market returns in 9 out of 11 years in the study period. When we employed the Sharpe ratio in analysis it is found that after considering Sharpe ratio for low PEG stocks, portfolio performance shown better results than market results in 9 years out of total 11 years study period.

**Table-2: Portfolio Returns Based on Low PEG compared to Market Returns**

Year	Low PEG Ratio		Market Return		Differentials
	% Return	Sharpe Ratio	% Return	Sharpe Ratio	
2006	15.56%	-0.213	-4.188%	-0.639	19.748%
2007	27.93%	1.031	31.903%	1.218	-3.973%
2008	-35.19%	1.313	-48.301%	-1.713	13.11%
2009	117.73%	6.133	77.671%	4.138	40.059%
2010	33.31%	1.716	46.213%	3.103	-12.903%
2011	15.93%	0.541	23.171%	0.829	-7.241%
2012	61.20%	4.131	39.216%	2.161	21.984%
2013	67.31%	4.29	43.19%	2.973	24.12%
2014	43.13%	3.127	36.238%	2.901	6.892%
2015	54.73%	3.259	45.319%	3.128	9.411%
2016	61.73%	4.317	52.813%	4.013	8.917%
<b>Mean</b>	<b>42.125%</b>		<b>31.204%</b>		

**3. PERG ratio compared to Market Returns using Standard Deviation as a Proxy of Risk**

It is depicted by Table 3 that when stocks are screened using low PERG-SD ratio, the results shown a better results compare to those of market returns over 8 years out of 11 years in question. When Sharpe ratio was employed to measure the returns, the Portfolio of stock with Low PERG\_SD ratio shown better performance in 8 out of 11 years in question.

**Table-3: Portfolio Returns Based on Low PERG-SD compared to Market Returns**

Year	Low PERG Ratio		Market Index Return		Differentials
	% Return	Sharpe Ratio	% Return	Sharpe Ratio	
2006	25.87%	1.107	-5.183%	-0.721	31.053
2007	23.15%	0.917	30.107%	1.138	-6.957
2008	-23.19%	-1.103	-45.109%	-1.501	21.919
2009	87.96%	4.973	76.029%	2.915	11.931
2010	42.16%	2.198	45.023%	2.916	-2.863
2011	19.02%	0.591	21.158%	0.791	-2.138
2012	98.05%	5.183	37.091%	2.713	60.959
2013	91.17%	5.001	43.137%	2.917	48.033
2014	83.26%	4.951	41.128%	2.189	42.132
2015	103.27%	5.013	51.197%	3.713	52.073
2016	97.53%	5.021	49.179%	4.171	48.351
<b>Mean</b>	<b>58.932</b>		<b>31.251</b>		

**4. PERG Ratio compared To Market Return using Beta as Proxy of Returns**

The below Table 4 shows the better returns compared with the market average in 8 out of 11 years when stocks were screened on the basis of using low PERG-Beta ratios. When the portfolio performance is measured by employing Sharpe Ratio, the analysis demonstrate a better portfolio performance of the Sharpe Ratio of low PERG-Beta screener compared to market performance in 8 out of 11 years.

**Table-4: Portfolio Return on the Bases of Low PERG-Beta compared to Market Return**

Year	Low PERG-Beta		Market Return		Differentials
	% Return	Sharpe Ratio	% Return	Sharpe Ratio	
2006	23.13%	1.391	-5.197%	-0.593	29.327
2007	18.19%	1.103	28.219%	1.218	-10.029
2008	-24.73%	-1.219	-51.039%	-1.914	26.809
2009	97.78%	5.919	72.08%	4.095	25.9

2010	40.29%	2.837	43.042%	3.395	-2.752
2011	18.28%	0.832	23.818%	0.914	-5.538
2012	68.31%	7.819	39.125%	2.974	29.185
2013	53.91%	5.612	41.95%	2.714	11.96
2014	43.21%	4.031	28.03%	1.917	15.18
2015	71.29%	5.819	43.09%	2.817	28.2
2016	86.98%	6.103	56.83%	4.915	30.09
<b>Mean</b>	<b>45.159</b>		<b>29.086</b>		

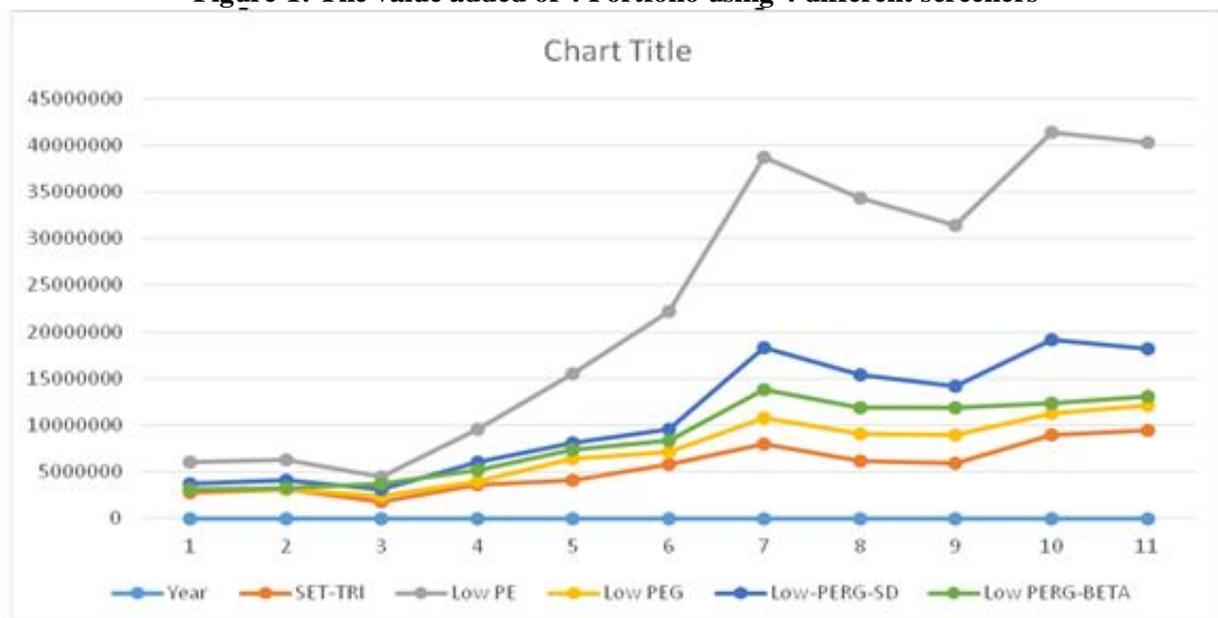
**5. Empirical Result after using all the different Screener**

The 30 stocks portfolio and the value therein the investment is compared using selected PE, PEG, PERG- SD and PERG-BETA with that of market average and presented below in TABLE 5 and FIGURE 1. As depicted in the figure PE portfolio shown the highest average returns and the highest values added to the portfolio subsequently followed by PERG-SD, PERG-BETA and PEG. All the portfolios using the screeners showed better performance over market average.

**Table-5: Comparison of the Value Added of the low PE, PEG and PERG-SD and PERG-BETA to That of Average Market (In Baht)**

Year	SET-TRI	Low PE	Low PEG	Low-PERG-SD	Low PERG-BETA
2006	2,801,341	6,019,348	3,117,786	3,793,627	3,109,831
2007	3,127,871	6,331,729	3,137,335	4,142,371	3,197,831
2008	1,734,894	4,507,653	2,388,776	3,177,126	3,742,253
2009	3,668,945	9,558,814	4,006,930	6,035,907	5,174,596
2010	4,078,320	15,535,129	6,433,603	8,092,771	7,326,081
2011	5,857,150	22,256,263	7,191,081	9,570,785	8,326,230
2012	7,965,181	38,713,185	10,774,375	18,355,362	13,828,903
2013	6,139,258	34,318,823	9,113,386	15,352,381	11,826,931
2014	5,891,315	31,419,883	9,003,817	14,192,481	11,913,481
2015	8,967,133	41,418,931	11,327,155	19,213,773	12,413,213
2016	9,413,765	40,331,237	12,127,931	18,217,137	13,121,955

**Figure-1: The value added of 4 Portfolio using 4 different screeners**



Thus the above empirical study during 2006-2016 indicated that the Securities Exchange of Thailand resulted in better performance of those Portfolio that used PE, PEG or PERG as screening the portfolio. When these screening portfolios were compared to the market average, a better performance can clearly be seen in the portfolios using these screeners. Thus the result found in the present empirical study is consistent with the earlier findings in the Thailand stock market. Here, PE appears to be the most sound return indicator among the other screeners used in the study. Apart from others, standard deviation appears to be a better proxy of risk than the BETA coefficient when it is employed to select value stocks.

## CONCLUSION

The present study employed the concept of value investing and used the tools pertaining to it and the ratios like PE, PEG and PERG were used through out the study as screeners to come to a conclusion whether value investment in the portfolio based on screeners yielded better return performance compared to market or not. Data was extracted from the Securities Exchange of Thailand and put on analysis for hypothesis testing of the present study. Portfolio returns of low PE, low PEG, low PERG are first calculated and on final analysis are found to be better than that of market average. The present paper used standard deviation and beta coefficient as a proxy for risk and standard deviation proved to be better risk proxy for the low PERG portfolios and provide better return performance when used with beta coefficient. In the entire study, PE ratio as a screener yielded the best returns if compared with other screeners.

The implication from this study is that through we can employ risk and growth in the screening of the stocks/portfolios to judge the stock/portfolio return performance yet the traditional PE used as screener is still performed over and above others. Thus for an investor who is less sophisticated and who used PE as a basis screener for stock/portfolio selection can yield aout standing return over years. In addition to the above, portfolios using standard deviation as a proxy of risk shown better performance than those which employed beta coefficient as proxy of risk. Thus, it is more useful to consider total risk rather than systematic risk for Thai investors.

There are some limitations to this as well. First limitation is the lack of data, the time period 2006-2016 used in the present study is quite a short period of time to come at any sound conclusion. A study based on the longer time frame can yield better results apart from this the time period divided into the shorter periods according to economic situations can draw better conclusions and for this longer time horizons can provide different results. Second limitations of the study is the proxies for growth and risk that may not be appropriate at some instances. According to a number of research based on the subject forward looking growth proxy seem better than historical growth used, other risk adjusted proxy such as adjusted beta coefficient could also be tested. Thus it is recommended that further study may be conducted after considering longer time frames and employing different growth and risk proxies and more factors could also be used as screeners. Finally, presents study provide a good insight into the benefits of using selected financial ratios in screening value stocks in the developing stock market such as Thailand.

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**A STUDY OF INVESTOR PERCEPTION TOWARDS MUTUAL FUNDS IN DELHI NCR**

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**ABSTRACT**

Now a day, every individual has some savings to invest in. People are looking for different avenues to invest their hard core savings. To study the different avenues for investment, it is necessary to analyze the perception of investor towards these avenues. But in the busy schedule, Aam admi is looking for save and secure investment. So the researcher in her research has decided to study the investor perception towards the mutual funds. Due to limited time, we are focusing on Delhi and NCR. The research will be based on primary data. The information will be gathered through questionnaire. To conclude People are not aware of various functions of mutual funds. There is lot of scope for the growth of mutual funds. Investors are satisfied as mutual funds form the portfolio to satisfy the need of every demographic factor of individuals.

*Keywords: investment, mutual funds, portfolio, demographic factors, perception*

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**INTRODUCTION**

Mutual fund is basically a bunch of savings of different investor who share a common financial goal. The bunch of savings is invested by fund manager in different securities grouped together depending upon the financial goal of the investor. In India, these securities can be shares, debentures, money market instruments etc Now the question arises that how the appreciation on the investment be shared among the different investor so the solution to the problem is that the appreciation is divided on prorata basis in proportion to the number of units owned by the investor. A mutual fund gives option to investors to diversify their savings at relatively low cost. Fund manager process information, identify investment opportunities, formulate investment strategy , invest funds, monitor progress at very low cost. Mutual fund facilitates easy processing with good returns. So investors feel it convenient to operate.

Mutual funds in India are passing through a great transformation like regulatory improvement and growth. This transformation is due to recovering from global crisis of 2008. There are associations formed for growth and development of Mutual funds Industry like Association of Mutual funds in India (AMFI), SEBI (Mutual Funds) regulation 1996. We can quote the figures to show the development of mutual funds Industry like there are 43 Asset Management Companies functioning in India (32 domestic and 11 foreign funds House). Growth in Asset under Management (AUM) experience has been unprecedented, growing at CAGR of 28% over the last four years. Mutual Funds are into healthy capital market which supports the increased liquidity in the money market. Mutual funds are constituted as a trust in accordance with the Indian trusts Act 1882 by the sponsor. Every investor is not risk lover. There are investors who are risk averter also. Every investor has his own risk appetite and believes to invest in the market. Every investor always want to invest in saving basket of mutual funds which are safe to invest in and should be profitable among different investment avenues.

Mutual funds are under regulatory authorities and liable to show in accounting and tax regulation. Mutual funds are tax free to the investors. Mutual funds entities are not taxed on their income until and unless they distribute the income to the investors. Taxable distribution can be a capital gain; it all depends upon how the funds earned are distributed.

Few terminologies used in Mutual Fund Industry

Sponsor

Asset Management Company

Trustee

**Custodian**

Sponsor is a one who contributes atleast 40% of net worth of investment managed and meet the eligibility criteria mentioned under SEBI (Mutual Funds) regulation 1996. He can act alone or in combination of other corporate bodies. But the main benefit to the sponsor is that he is not liable to pay any loss or shortfall resulting from the operation of scheme.

Trustee is the one who safeguard the interest of investors and ensure that AMC functions properly for the interest of the investors in accordance with SEBI (Mutual Funds) regulation 1996. And with the trust deed and offer documents of respective scheme.

AMC is a company appointed by Trustee as investment Manager of Mutual funds. It is authorized by Trust deed, appoint the registrar and Transfer agent who manage the mutual funds. The registrar is the one who processes the application form, redemption request and dispatch account statement to the investors. Registrar is the intermediate between the investor and AMC. He communicates and handles the issues of investor.

### **History of Mutual Funds**

The mutual fund industry came into the picture of financial market in the Indian economy in 1963 with the formation of United Trust of India. This is the initiative taken by the Government of India with the support of Reserve Bank of India. The first and the foremost scheme launched in India were rather slow due to inadequate infrastructure and investors' psychology prevailing in that tenure. There were investors who were risk averter who were interested in schemes with moderate capital risk and return over bank deposits who ever restricted the launch of more risky products in Indian Capital Market. But after few decades these funds were treated more like a service then a product like professionally financial managed. But in 2000's Mutual funds is now treated as a product.

### **Role of Fund Manager**

- Analyse investor behavior
- Analyse investor need and expectation
- To gear up the performance to meet investors requirement
- Fund selection/switching behavior of investor
- To design the fund schemes
- Penetrate the mode of investment in India

### **Factor affecting investment in Mutual Funds**

- According to Risk
- Type of Issue(Government Agency, Corporation, municipalities)
- Maturity period of Bonds
- Type of Securities
  - a. Domestic Funds
  - b. Global Funds
  - c. International Funds

### **Risk involved while Investing in Mutual Fund:**

- Underperformance of Portfolio
- Cost of investment should not exceed the expected return
- Shift or transfer of Fund manager
- Style Drift(difficult to move the trend of investment by the investor who focus on style of investing in large cap funds to mid or low cap funds)

### **Benefits of Mutual Funds:**

- Liquidity
- Flexibility
- Low transaction cost
- Well regulated
- Transparency
- Affordability
- Diversified Portfolio
- Professionally Managed

### **Refer Charts in Mutual Funds File 3.**

**REVIEW OF LITERATURE**

*NCAER (1964)* made a survey of households to acknowledge the motivation and attitude of individuals towards saving.

*Ippolito (1992)* states that the past performance of funds selected by investors. The scheme of money flows into winning funds more quickly than they flow out of bringing down funds.

*Gupta (1994)* conducted a study of financial products for the future which is help to make the policy of mutual funds in designing.

*Kulshreshtha (1994)* indicates few guidelines to the investors while selecting diverse mutual fund schemes.

*Madhusudhan V Jambodekar (1996)* concluded a study to identify the factors to find out the awareness about Mutual funds, which also influence the purchasing decision and the choice of a selected fund. Investors get the information about Mutual fund schemes through primary source that is newspapers and magazines and fund provider service is the important factor while choosing Mutual Fund Schemes.

*Sujit Sikidar and Amrit Pal Singh (1996)* this survey states that to understand the Nature of the investors of the North Eastern region towards mutual funds and equity investment portfolio. They also states that the UTI and SBI schemes are very popular and during the time of which the survey was done due to this other funds was not as successful.

*Shankar (1996)* states that the Indian investors follow the consumer product distribution model as commodity products of Mutual Funds. The market should also follow the brand image and return in the selection of fund/scheme while investing in any mutual fund

*SEBI – NCAER Survey (2000)* was carried out to estimate the portfolio size, economic and demographic profile their number of households and the population and investment preference for equity as well as other savings scheme. This is an exceptional study of investors. Risk perceptions match their households preference for instruments. Bank Deposit has an appeal across all income class; 60 million households (estimated) equivalent to around 43% of the non- investor households. There is also lack of awareness about stock markets and compared with low level income groups, higher share of investments in mutual funds have higher level income groups. Mutual Funds describes that mutual funds have still not become truly the investment vehicles for small investors.

*Sarish and Ajay Jain (2012)* states that the investors are having options to invest money in mutual funds and other financial instruments like debentures, equity shares, bonds, warrant, bnk deposit . These all are the purpose of saving and investment. Mutual fund investor is not much aware about a common investor who invests their savings into the different assets.

**OBJECTIVES OF THE STUDY**

- To analyze the investor's preference towards investment in mutual funds when other investment avenues are also available in the market.
- To find out the overall criterion of investors regarding investment.
- To find the type of scheme of mutual fund preferred by investor(MIP fund, SIP).
- To know the awareness among people of mutual fund in Delhi and NCR
- To find investors' Knowledge of risk in investment and risk analysis.

**RESEARCH METHODOLOGY**

In this research, analytical study has been used mainly from primary sources, but at times, secondary sources of data have also been used. The data collection method was used to obtain the desired information from primary sources. Questionnaire has been used as an instrument for data collection. Sample size belongs to the Delhi NCR region and considering an individual investor as a sampling unit. Random and Judgment sampling has been used for collecting the sample.

**LIMITATIONS**

- Investor invest in Mutual funds for Tax saving purpose
- The investors prefer to choose short term investment in mutual fund
- Investors are more dependent on information provided by agent or fund manager.

**OBSERVATIONS**

- Most of the investors prefer to invest in open-end option of mutual fund scheme.
- Equity options and SIP mode of investment are more preferred by investor
- There are investors who bear loss in mutual fund investment does not hold by them for more than a year.

**SUGGESTIONS**

- Mutual funds industry is required to initiate with special services for the investors for the welfare of the investors
- Different mutual fund companies should provide advisory services for portfolio designs for their agents
- Participative decision making in portfolio designs with agents and investors
- Agents should disclose all terms and conditions to their investors regarding their respective portfolios
- Mutual fund investment catalog should be published in investor friendly language.
- Awareness and educating investors regarding risk analysis, tax savy investment should be developed .
- Periodic reviews for investment should be provided to investors on regular basis.
- Diversification is required to manage and balance the risk involved
- SEBI should regulate more control on asset management companies with the changing environment scenarios
- Investor should invest in liquid securities to meet their unforeseen requirements
- Investors should do comparative analysis of different portfolio in mutual fund schemes before deciding your investment plan.
- The performance of mutual fund schemes could help the investors in understanding the scientific appraisal of professional expertise.
- Agents should intimate the growth and development of different sectors to the investors.

**CONCLUSION**

It has been observed and analyzed with the discussion with different investors that they are not aware about the different benefits of mutual funds., working of the mutual fund companies and industry. In our country there is lot of scope for the development of mutual fund industry as in today's scenario the mutual fund agency does not satisfy all investors need. But need to improve on that part. SEBI is also working on updated technological improvements in Mutual fund industry which will be investor friendly. It will also help in updating the investors regarding their mutual fund investment and other proposed investment plans.

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**IMPACT OF ADVERTISEMENT ON CONSUMER BEHAVIOUR: STUDY OF COSMETIC PRODUCT**

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**ABSTRACT**

*An advertisement is main strategy adopted by company for promotion of their products. It plays vital role to change the behavior and perceptions of consumer towards their product, which is showcased by celebrities and good-looking models through media and advertisement. The cosmetic and beauty products have become very significant for today's world. The people are so cautious, careful and concerned for their looks and appearance. The paper examines the effect of advertisement on consumer attitude towards beauty products. The research has been conducted in National Capital Region (NCR) to know the effect of advertisement and influence on the usage of cosmetic product. The survey has been conducted on 500 people of NCR. It is found that Advertisement Company may change consumer perception for products. This paper also concluded that the firms use various celebrity endorsers of different age groups for targeting all types of customers for cosmetics product. This paper proves that advertisement motivates the consumer to buy products which results in positive relationship between advertisement and consumer behavior.*

*Keywords: Advertisement, Promotion, Products, Celebrities, Models, NCR, Appearance*

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**INTRODUCTION**

Advertising is a form of communication for marketing and used to encourage, persuade, or manipulate an audience (viewers, readers or listeners; sometimes a specific group) to continue or take some new action. Most commonly, the desired result is to drive consumer behavior with respect to a commercial offering, although political and ideological advertising is also common. Advertising is the communication relayed from companies to persuade an audience to purchase their products.

This communication is usually through various forms of paid media -- TV and radio commercials, print ads, billboards and more recently, product placement. Ads are placed where advertisers believe they will reach the largest, most relevant audience. Commercial businesses use advertising to drive the consumption of their product, while non-profit organizations may place ads to raise awareness or encourage a change in behavior or perception.

The purpose of advertising is nothing but to sell something - a product, a service or an idea. The real objective of advertising is effective communication between producers and consumers.

Advertising promotes more than mere products in our popular culture. Because images used in advertising are often idealized, they eventually set the standard which we in turn feel we must live up to. Advertisements serve to show us what the ideal image is, and further tell us how to obtain it. Advertisers essentially have the power to promote positive images or negative images. Unfortunately, most of the roles portrayed by women tend to fit the latter description. Women today are constantly being reminded of what is considered beautiful. There are thousands of advertisements that promote this elusive beautiful image to women of all ages, shapes, and sizes. By placing photo-shopped and computer-enhanced models in advertisements, society has built up impossible standards of beauty, which has led to feelings of inadequacy.

**Benefits or Importance of Advertisement**

Advertising broadens the knowledge of the consumers. With the aid of advertising, consumers find and buy necessary products without much waste of time. This speeds up the sales of commodities, increases the efficiency of labor in distribution, and diminishes the costs of selling.

It is an accepted fact that without market stimulus of heavy advertising, consumers might have waited another sixty years for the product evaluation that took place in less than ten years - it took after all over sixty years from the invention of the safety razor before the first acceptable stainless-steel blades appeared in the market. These words are more than enough to testify the potentialities of advertising in the field of modern marketing system.

**LITERATURE REVIEW**

**1. Kruti Bhatt, PennalSankhla (2017)** studied consumer buying behavior towards cosmetic through 100 samples in Navsari city, Gujrat. Both primary data and secondary data were used as a part of a research. The paper highlights that people always consider quality over quantity while purchasing in matter of cosmetic products and always consider the advice of beautician. Through 100 samples in the city the paper concluded

that People consider cosmetics as necessary part of routine life which is positive insight for marketers of cosmetic product.

2. **Sumathi, Dr. Mustiary Begum (2016)** research on Impact of Advertisement on Consumer Behavior of cosmetic products. Both secondary and primary data were used as a part of study. The city of Mangalore was taken as the area for the purpose of study. The paper identifies the impact of advertisement on consumer awareness and how to determine the influence of advertising on attitude formation of consumer attitude. The paper concluded that consumers are rational with regard to their purchases and seeking to maximize their satisfaction when it comes to consumer goods. Awareness about a product influences consumers' purchase of the same to a great extent. Other factors that influence one's taste and preference for a product are psychological and environmental. Advertisements, hence, play a role in influencing the taste and preference of consumers' choice.
3. **Akwasi Ampofo (2014)** seeks to examine the effects of advertising on consumer buying behavior considering demand for cosmetic products by residents in and around Nagarabhavi, Bangalore. Using sample of 100 respondents' statistical tools such as regression were used and found that advertising does influence expenses incurred on cosmetics products but much influence on the purchase of cosmetic products results from one's income or pocket money available, and other factors like price of the product, the brand and other people's recommendation concerning the product. The paper concluded that, advertising satisfies the needs of the firm and the wishes of consumers.
4. **Anjana S S (2018)** conducted the study on factors influencing cosmetic buying behavior of consumers. The research mainly focuses to understand the buying pattern of consumers for cosmetic products. This study reveals that various factors like quality, brand, price, advertisement and packaging have tremendous influences on consumer purchasing behavior. When it comes to beauty products, it is even more intense that all the five factors play a major role in consumer buying decision.
5. **Naveen Rai (2013)** examines the influence of advertising on consumer buying behaviors and determine the influence of advertising on attitude formation of consumers. The findings of the study show that advertisement worldwide influence the behavior and attitude formation of consumers not only in India but also worldwide. The consumers of durables products have their motivational sources which are advertisements and study revealed that advertisement motivates them to materialize the purchase of durables

### OBJECTIVE OF THE STUDY

The Research study revolves around the following objectives

- To study the advertising strategy of beauty companies.
- To study the impact of advertising on beauty products.
- To study the consumer needs and preferences.
- To know the other factors influencing consumer purchase besides advertisements
- To know the extent to which purchases of consumers are based on advertisement.

### RESEARCH METHODOLOGY

Research is logical and systematic gathering and analysis of information, pertaining an issue or problem for the purpose of arriving at a certain conclusion.

The study was to find the effects of advertising on consumer buying behavior of women with a special case of users of cosmetic products. The methodology used to help us with the research, shows how the research was carried out taking into consideration available resources and limitations.

#### 3.1 Study Area

The study area for the research was Delhi NCR.

#### 3.2 Sample Size

The sample size for the study was 500 respondents who reside in and around NCR only. In this only women have been taken so that our object can be achieved to understand the consumer perception.

#### 3.3 Sampling Technique

The sample techniques are the questionnaire. This sample was chosen bearing in mind the constraints and the limited resources. This was to get responses from females only.

**3.4 Source and Type of Data**

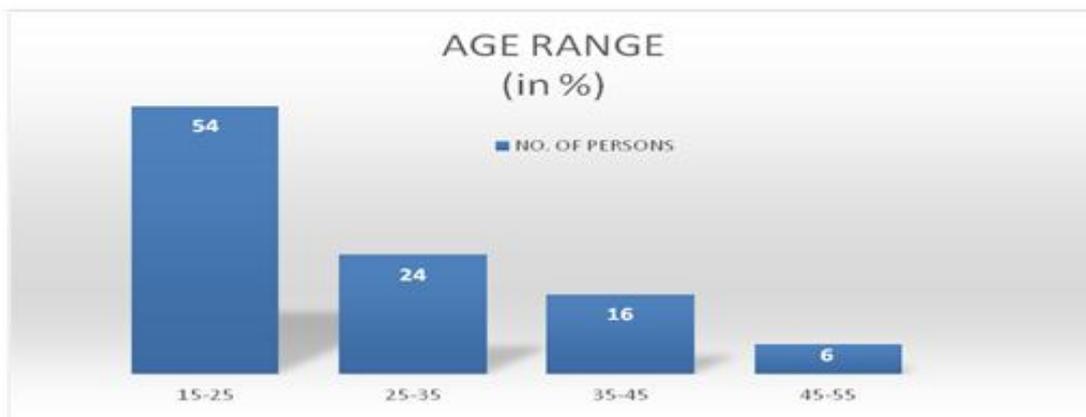
The sources of data were primary data, collected from respondents in the study area, observations and interviews conducted with respondents. Observations of the consumers were made through questionnaires filled randomly by people about the purchase of cosmetic products. We interacted with some of them when they were done filling the questionnaire. The information collected through the issued questionnaire, interviews and observation gave us a clear understanding of the buying behavior of women on cosmetic products and which factors they considered in their purchase.

**3.5 Research instrument**

Questionnaire was the main device used in the collection of data. Primary data were used. The questionnaires contained structured questions with the main aim of eliciting information on the effects of advertising on consumer’s purchase. The questionnaire was structured with closed ended questions and open ended questions. The closed ended questions made it easier to compare the views of the respondents. It also provided standardized responses and made coding easy. The open ended questions gave the respondents more room to express their views and opinions, answer questions in their own way and give suggestions where necessary. It also gave us different views from the respondents and quantitative information on the monthly income. Using the data from the consumers assisted us to process the information needed and to test the information empirically. The questionnaires were made up of list of questions relating to the objectives of the study.

**DATA FINDING AND ANALYSIS**

**1. Age Range**



With the age group of 15-25, 54% people prefer to buy more products as they are younger and fashionable. With 24% of age 25-35 buy less as compare to 15-25. Then age with 25-35 buy 16% of the products as they feel that it doesn’t matter at products.

The age group girls from age group 15-25 are more conscious as they are more focused on their appearance, college going girls are more concerned. As the theory depends on 3 C’s cautious, careful and concerned. So, these age group are more apprehensive about their looks. Whereas from age 25-35 get loaded with many responsibilities of family and age 35-45 women do not believe in experimenting, they generally stick towards their products and they are loyal towards the products so the percentage is less than other age groups.

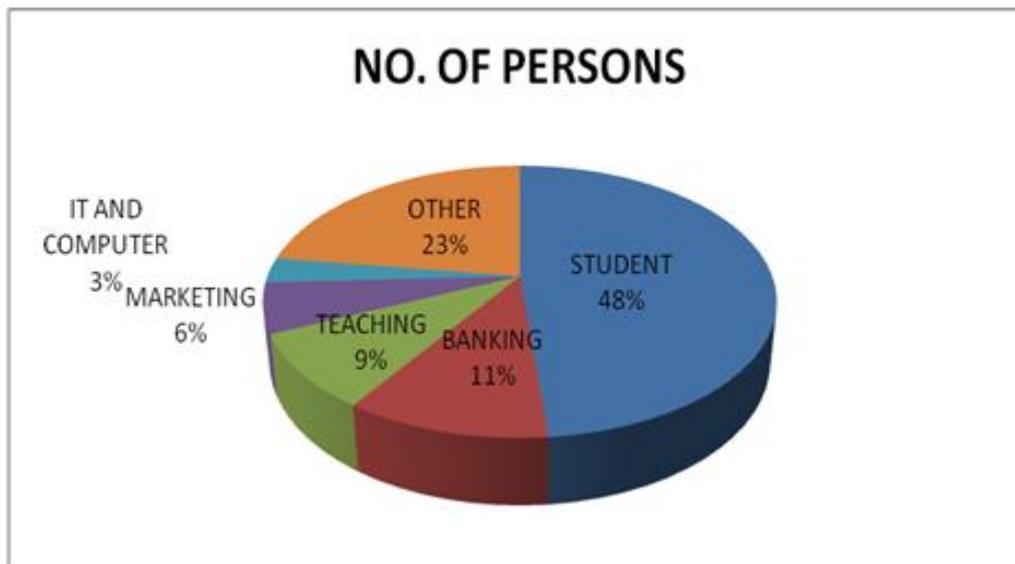
**1. Marital Status**



Comparing the marital status, we concluded that single females with 61% buy more as compared to married females with 39% because they are more conscious about their appearance and have more time than of married women's as they are more engaged in family responsibilities and have less time to experiment with their looks.

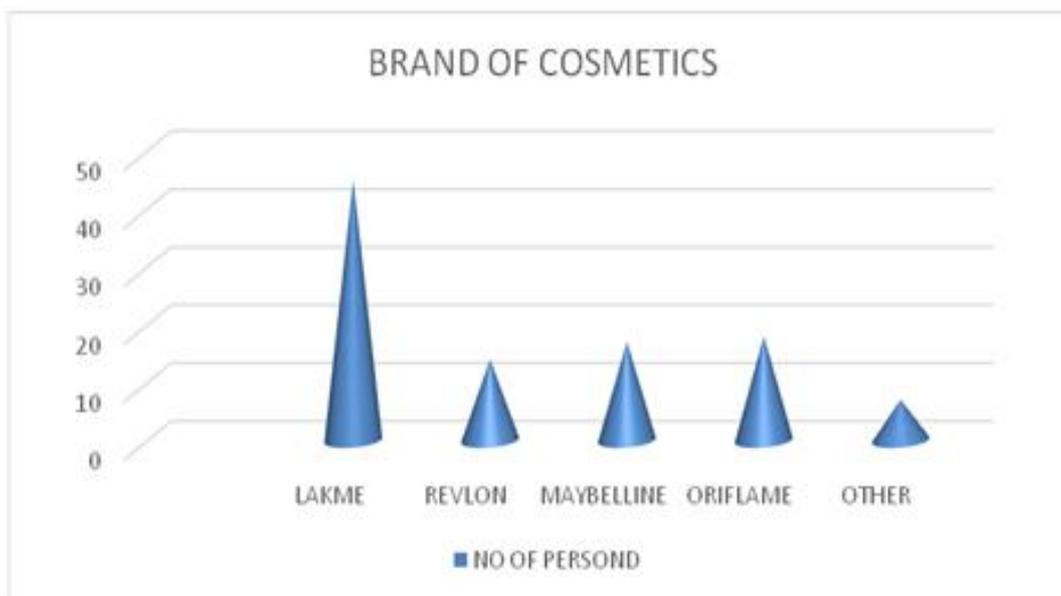
The survey clearly explains the less usage by the married women which is due to onerous and stressful responsibilities upon them.

**2. Occupation**



Mostly female students buy more beauty products as they are young and fashionable than any other occupation. The only thing students are worried about is their looks and how they present themselves in front of other so that pressure.

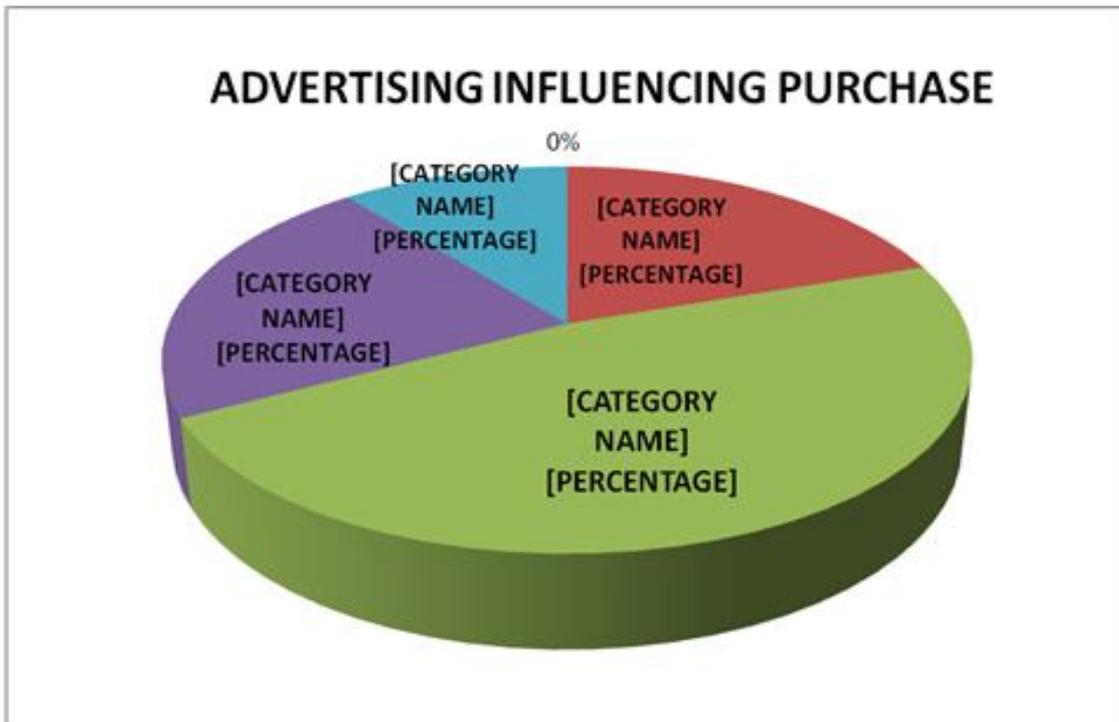
**3. Which Brand of Cosmetics Do You Use**



Unless one is living under a rock everybody knows about the plethora of brand that are available now-a-days. When questioned about the most favorite brand, lakme came out the most favorite brand followed by other brands like Revlon, Maybelline or Oriflame.

45% of people find Lakme the best as they feel that it gives younger looking skin. 14% as Revlon 17% as Maybelline 18% oriflamme and 7% feel that all these brands don't suit them. Lakme is endorsed by Kareena Kapoor khan and offers you variety of products for the people of different age group and over the years have gained the loyalty of females so that make one of the reasons that make it most preferred product among women.

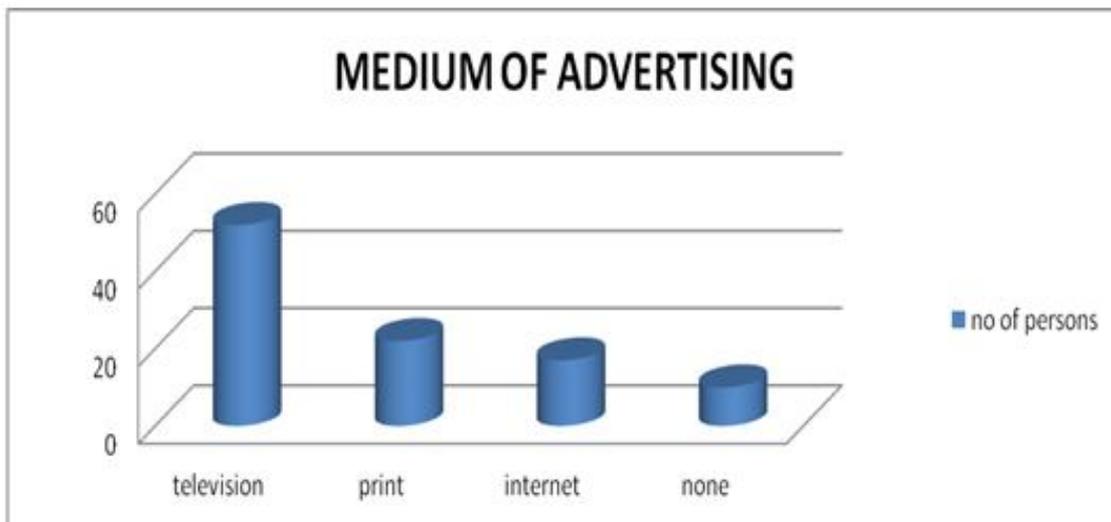
1. Does Advertising Influence Your Purchase



20% of people are strongly agree as they feel that advertising influences them the most as compared to any other purchasing factor. 48% feel agree that advertising is one of the major factors that impact the purchasing behavior. 22% are neutral about this and 11% are disagree.

Given to the global competition brands have to encounter, good advertisement becomes one of their major weapons to thrive. Hence to aggregate their sales they put in a lot of efforts. By seeing the recent survey , I can sutely say that their effort bear them fruit as well because it is more than half of the proportion. We can conclude that more than half proportion think that advertising is the most important factor that affect their consumer behavior towards purchase of any product.

2. Which medium of advertising influence your purchase



The imperative role of the visual media is increasing over the years. Even the survey results depict the same,52% of the sample says that they buy products while they see the advertisement on television, 22% from print/brochures as it attracts from buying the products.17% do online shopping as it is convenient rest 10% don't feel the same.

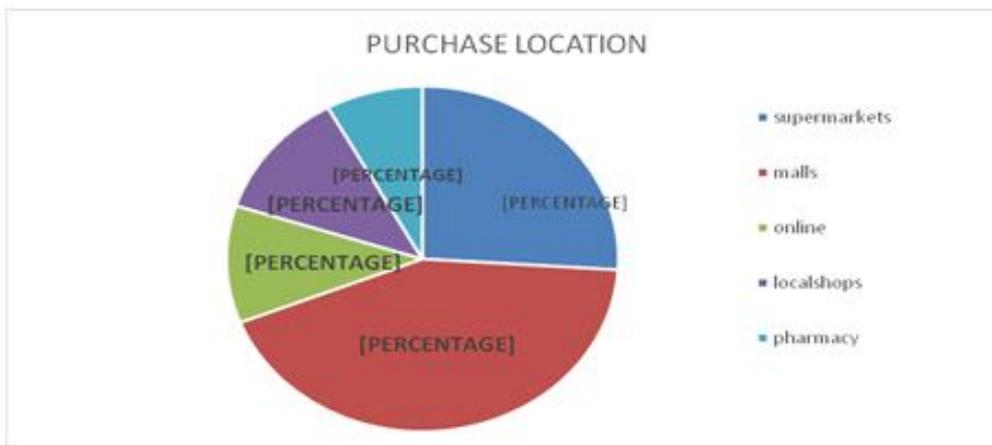
Television is easily available irrespective of the social status or level of income and covers the wide range of masses which make it the most preferred medium of advertising.

7. What purpose do adverts on the cosmetic product serves



29% says the purpose is to inform you the features and benefits of the product and spread awareness about the products. 23% people believe that it creates a desired perception of the product. 27% people create a preference as what they want and need and rest 12% create awareness of new products.

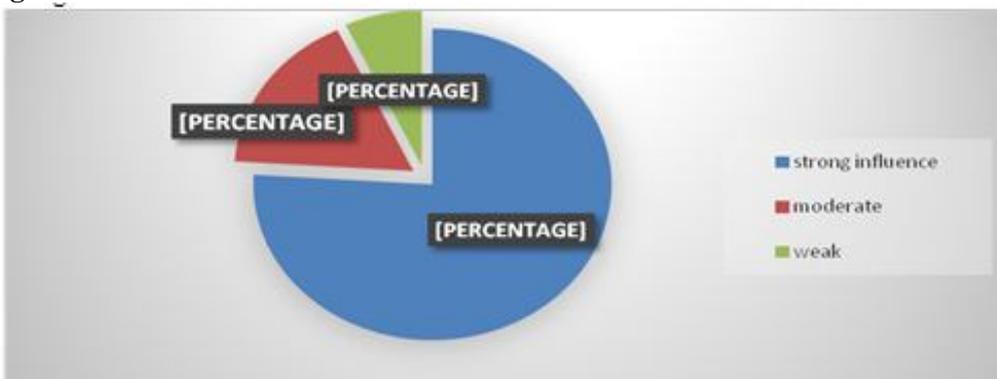
8. From where you purchase the products



People are preferred to buy more from malls than supermarket as they are more reliable. 43% from malls and 26% from market. 11% do online as they feel it convenient. 12% from pharmacy and rest from other. Since it is the matter of skin so females are ready to spend on cosmetic products and wish to buy them from reliable stores and every individual prefer different shades and products because of their complexions so they find it more convenient to try at stores rather than shop online.

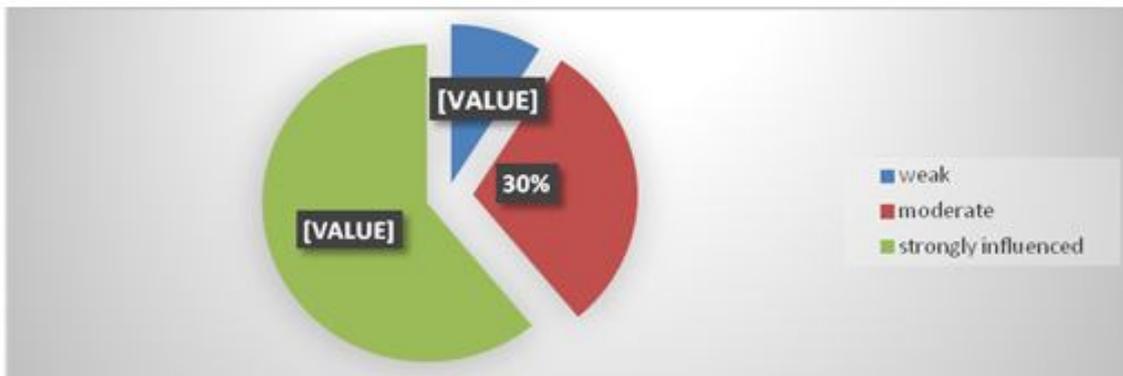
9. Rank the factors which most influence your purchase often cosmetics product?

i) Advertising



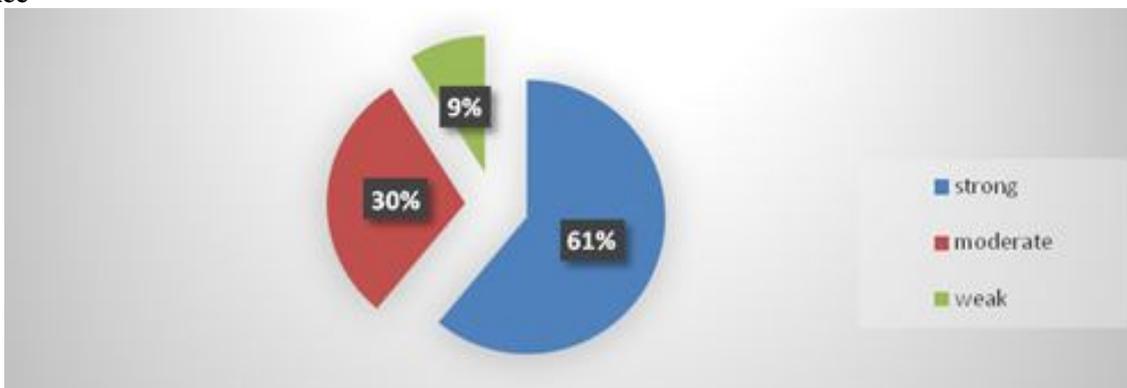
With 76% mostly people easily get strongly influenced by watching the advertising.

**ii) Brand**



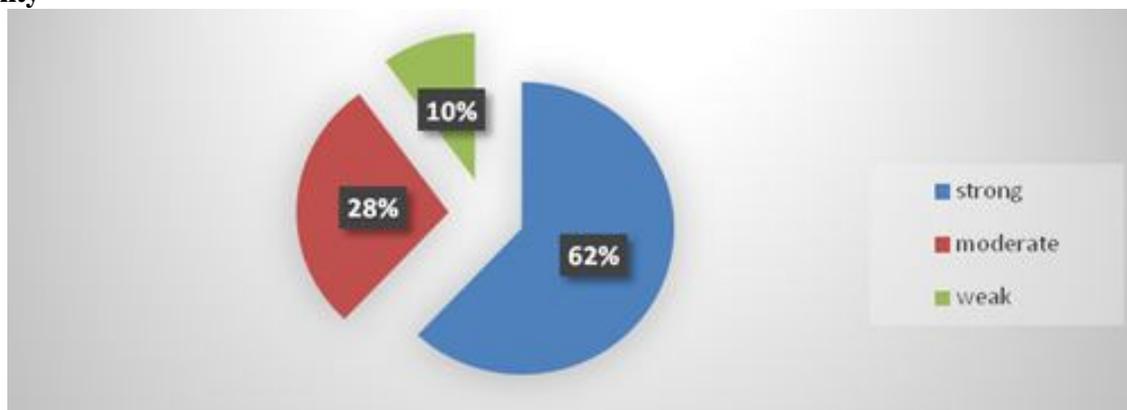
With 61% female respondent get moderate influenced by the brand.

**iii) Price**



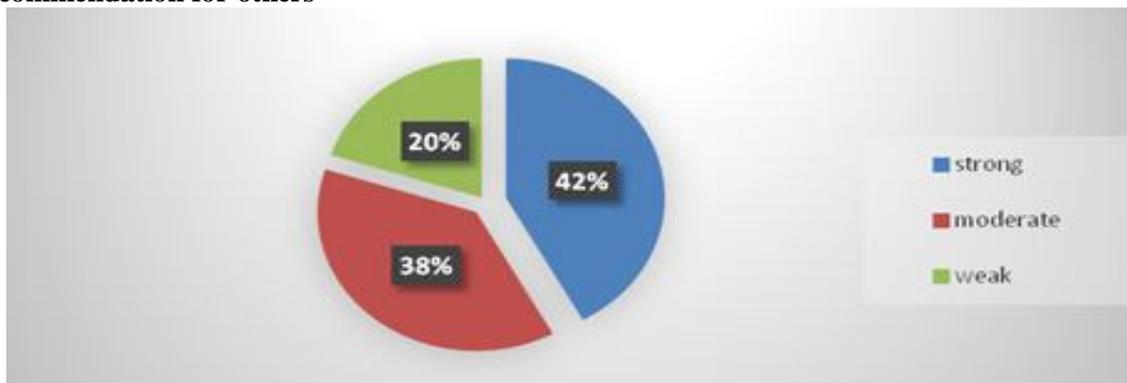
Mostly people look for price they buy beauty products according to beauty products price.

**iv) Quality**



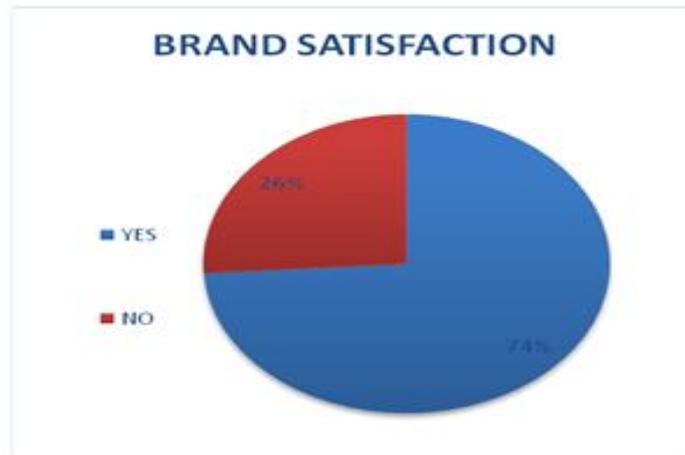
Many female respondents buy beauty products based on its quality.

**iv) Recommendation for others**



Female respondent asked for suggestions about the product then they buy the same

**10. Are you satisfied using the product**

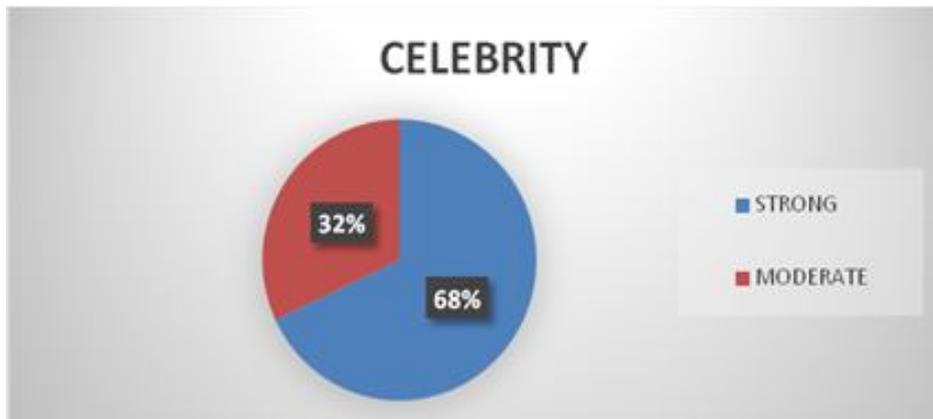


Mostly female respondent is brand loyal.

The brand satisfaction plays a vital role so that the brand customers can reflect their brands loyalty towards a product and the brand. Women are cautious about their standard of beauty. Hence, the name of the brand provides great sense of contentment which is manifested in the survey i.e 74%

**11. Celebrity endorser affects the brand loyalty of the product?**

**a) Celebrity**



Mostly female respondent gets more influenced by celebrity as they think or predict themselves to like them.

**b) Non- celebrity**



48% Female respondent don't get easily influenced by the non-celebrity.

**CONCLUSION**

The cosmetic and beauty products have become very significant for today's world, people are becoming so cautious, careful and concerned for their looks and appearance that have significant effect on their buying decision. Consumer demand differs according to their taste and preference and awareness about some influences consumer purchase to great extent.

Research was conducted under the region of Delhi NCR and 500 females were targeted randomly who use various kinds of cosmetic products of different brands. The study examines a rational consumer goes under a process before buying a particular product but when they were asked to rank the factors that affect their purchase, Advertisement was ranked as first with finding which reveals that 68% of the sample agreed that advertisement strongly influenced them to make a purchase. Results tell that advertisements are useful in coating the awareness among the consumers, Advertisements increases the awareness among consumers and gain trust of the consumers by endorsing through famous celebrities. Cosmetic are sensitive product so it is examined that people are ready to spend and prefer quality over quantity in regard to enhance their physical appearance. Women often seek products that make them remind about their appearances. The paper also highlights the different consumption pattern of different age groups and their marital status. Single women are considered more regular users as compared to married women because married women are less with time to spend on their appearance and by that time they have experiment with different products of different brand so they are more aware about the benefits and various features offered by products and they realize it is better to stick on selected products that suits your skin best whereas single women are more daring to experiment with different products.

Brand, Quality and price are one among the strong competing factors in the decision-making process other than advertisement. The paper concludes that Advertising satisfies the needs of the firm as well as the wishes of consumers. Its role can never be replaced by any other means in this dynamic world of ours. It is therefore a must for firms to strategize and know when and where they should advertise to gain maximum returns. The consumers should be considered as a factor of production, they need to be informed about products and until that is done, the products of firms will still be in stores with no demand for them.

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Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

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