

Volume 6, Issue 2 (VI)
April - June 2019

ISSN 2394 - 7780



International Journal of
Advance and Innovative Research
(Part - 4)

Indian Academicians and Researchers Association
www.iaraedu.com

International Journal of Advance and Innovative Research

Volume 6, Issue 2 (VI): April - June 2019 Part - 4

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Journal - 63571

UGC Journal Details

Name of the Journal : International Journal of Advance & Innovative Research

ISSN Number :

e-ISSN Number : 23947780

Source: UNIV

Subject: Multidisciplinary

Publisher: Indian Academicians and Researchers Association

Country of Publication: India

Broad Subject Category: Multidisciplinary

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HOW ALEXA, GOOGLE ASSISTANT AND OTHER CHATBOTS ARE REVOLUTIONIZING OUR LIVES?**Nrupura Ramnath Dixit**

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ABSTRACT

Artificial Intelligence is soon transforming into an everyday reality across the globe. Organizations are bullish on their use of technology platforms to connect and engage with their customers. Developments such as Amazon's Alexa, Google Assistant and many others are changing the way customers and people in general perform their tasks. Companies are now increasingly jumping on to the technology bandwagon facilitated mainly by chatbots. This paper traces some of the origins of chatbot technology and focuses on its increasing popularity amongst organizations. An attempt has been made to provide a balanced analysis of the pros and cons of the chatbot technology and its implications on the users' everyday living.

Keywords: chatbots, technology, customers, organizations

INTRODUCTION

Chatbot technology has been a revelation in the technology world. Chatbot which essentially is a mix of two terms – “chat” and “robots”, is a computer program that simulates human interaction with the support of artificial intelligence. The advent and proliferation of Artificial Intelligence (AI) has swept the technology landscape and its impact on our lives is increasing at galloping pace. Various organizations have begun to leverage the advantages of chatbot technology to serve business means and to enhance both their geographic reach and connect with the customers. It is imperative to study how the prominence of chatbots is changing the way organizations are operating and the impact it has on the lives of people. Furthermore, with business complexities increasing more than even there is a need to jump on the technology bandwagon, especially in the wake of Artificial Intelligence; else organizations face the threat of extinction in near future.

LITERATURE REVIEW

A close examination of the history of chatbot technology reveals valuable insights on its inception and expansion over the years. The chatbot technology came into existence in the 1960s. The earlier chatbots were built for fun and were designed with simple key word matching techniques. Over the years several chatbots architectures have been designed. Some of these include MegaHal (Hutchens, 1996), CONVERSE (Batacharia, et al, 1999), ELIZABETH (Abu Shawar & Atwell, 2002), HEXBOT (2004) and others. Research by (Shawar & Atwell, 2007) shows how chatbots can be used for various practical applications in everyday life such as education, business, helpdesk assistance, e-commerce and even for amusement. In another comparative study by (Hill, Ford & Farreras, 2015) found human to chatbot conversations to be more effective than human to human conversations. Furthermore, research by (Dale, 2016) shows that chatbot technology will be so disruptive that it will replace websites and apps in the future.

THE ADVANTAGES OF CHATBOTS**1. Benefits of Time & Cost**

Chatbots enable businesses to seek time and cost advantages while reaching to customers. Customers do not have to wait in queue for their problem resolution. They offer a win-win solution to both business providers as well as the customers seeking those services. This is further complimented in terms of saving cost of offering these services to end customers.

2. Creation of Customer Delight

Yet another distinctive feature of chatbots is that help organizations to tap customers and also ensure consistent engagement with them. This facilitates enhanced customer satisfaction and also builds customer loyalty towards the brand. Customers find quick response to their queries and enjoy better services from their respective service providers, leading to customer delight.

3. Eliminates Errors and Improves Efficiency

A study by (Brandtzaeg & Følstad, 2017) reveals that one of the prime motivators for people to use chatbots is the efficiency they provide. Since chatbots avoid any manual intervention, they facilitate almost an error free experience to customers. Even for organizations this serves as a boon as they do not have to worry about things going wrong, especially considering the fact that chatbots are not subject to fatigue or inefficiency at any given point of time.

DEMERITS OF CHATBOTS

Chatbots although beneficial also have their own set of drawbacks. It is relevant for organizations to be cognizant about these demerits to ensure that they are in better control while harnessing the chatbot technology.

1. Lack Human Touch

One of the demerits associated with chatbots is that they not involve a human touch as it is in case of face to face human interactions. Although they simulate human conversations, they do not essentially replace the human emotions, which is often a critical part of interaction with the customers.

2. Require Consistent Upgradation

Chatbots also tend to demand complex algorithms to serve businesses and their customers. The infrastructure and the technical wherewithal to build such complex algorithms is limited to organizations which are highly competent and capable in their technological prowess. Other small and medium operators may not be in a position to avail the benefits of chatbots due to lack of sufficient knowledge and infrastructure.

3. Issue of Technophobia

Chatbots may be a cause of concern in countries where the technology literacy is low. Also the presence of complex interface may be a hindrance for users and may dissuade them from using chatbots.

CONCLUSION

It is safe to assume that chatbot technology has been both a path-breaker and a trendsetter in the technology space. Like any other technological invention, chatbots too have their own share of lacunae; however their merits easily outdo their shortcomings. The pace at which Artificial Intelligence is expanding in its magnitude, there is little doubt that chatbots are here to stay and continue to influence human lives in a major way. It is therefore indispensable, both of organizations and its customer alike to acclimatize themselves to the various dimensions of chatbot technology, in order to reap maximum benefit from this technological marvel.

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A REVIEW OF THE RESEARCH LITERATURE ON: A STUDY OF COST CONTROL AND COST REDUCTION PRACTICES OF SMALL AND MEDIUM ENTERPRISES (SMES)

Ranbhare Sanjeev Vasant and Dr. Shriram Nerlekar

ABSTRACT

A review of literature: shows a nature with a collection of information and sets up the believability of researcher work; outlines earlier research and says how the current undertaking is connected to it; coordinates and condenses what is thought about a subject; exhibits that researcher have gained from others and that researcher exploration is a beginning stage for new thoughts. This research paper is a compiled from the thesis work done by the researcher on the topic, "A Study of Cost Control and Cost Reduction Practices of Small and Medium Enterprises (SMEs) in & around PUNE City with reference to Auto, Auto Component & Engineering Sector." In this research paper researcher had compiled the literature study done by the different researcher on cost control and cost reduction techniques which is also called as management accounting practices.

Keywords: Cost control & cost reduction techniques, Management accounting practices in SME's.

INTRODUCTION

Cost Control Cost Control is defined as the regulation by executive action of the costs of operating an undertaking, particularly where such action is guided by Cost Accounting. Cost reduction may be defined as the real and permanent reduction in the unit costs of goods manufactured or services rendered without impairing their suitability for the use intended. Better use of costing techniques helps in growth of the firm as well as the long term sustainability of the firm. In this research paper researcher had compiled the literature study done by the different researcher on cost control and cost reduction techniques which is also called as management accounting practices. Following is the summary of the review of literature:

REVIEW OF LITERATURE SUMMARY

Kaplan (1984), Kaplan sets that cost accounting practice in the late nineteenth century did exclude the portion of fixed expenses to items or to periods but instead, the act of estimating and allotting overhead expenses to items was begun by scientific management The advocates of scientific management supported by Fredrick Taylor were engineers who, by nitty gritty employment examinations and time and movement thinks about, decided "logical" gauges for the measure of work and material required to create a given unit of yield. Many cost ideas that are broadly utilized today, for example, escapable or avoidable overhead, sunk costs, gradual or differential expenses, and the pertinent timeframe for deciding if an expense is fixed or variable, can be found in Clark (1963's) book. Most cost accounting methods that are at present being used were created in the 19 century; by 1925 the majority of the systems have been created and the ensuing years' experience lack of development in the field. Those methods that were created in the modern period, which are presently viewed as conventional procedures incorporate Standard Costing, Variance Examination, and Absorption Costing. Inside the most recent three decades, the traditional costing systems have gotten a great deal of reactions from different researchers. The critics advocated by Johnson and Kaplan. From the above research paper researcher had understood the evolution of management accounting specifically cost accounting techniques.¹

Sheilds and Young (1992) seen that compelling long haul cost reduction activity requires change in the key reasoning and building up a hierarchical culture of constant improvement in quality expense and time. This study talks about the importance of long term cost reduction in the organisation. The above study helps researcher in understanding the concept of cost reduction.²

Anthony Govindrajan and Shank (1992) remarked that the job of the management accounting and cost management relies on the system pursued by the association (cost leadership or separation) so the compelling control frameworks must be characterized and separated based on the procedure pursued by the association. This study suggests that the role of management accounting and cost management depends upon the strategy adopted from the organisation.

Anand, Manoj (2004), this paper characterizes the applied structure of 'Cost Management'. An overview was led by the researcher to quantify the present status of theory and practices of Cost Management. This paper

¹ Kaplan RS (1984) the Evolution of Management Accounting, The Accounting Review, 59(3):390-418.

² Shields, Michael & Young, S.M. (1992) Effective long-term cost reduction: A strategic perspective. Journal of Cost Management. 6. 16-30.

concentrated on the issues identified with 'Activity Based Costing and its execution'. In this study review on cost management theory and practices is done.¹

Anand, Manoj and Sahay, B. S. and Saha, Subhashish(2004), In the mentioned research paper, an investigation of 53 CFO's of corporate India were directed. It is found as one of the significant research result from the present research paper that organizations are effective in catching precise expense and benefit data from 'Activity Based Costing' framework additionally results recommended that such firms has better experiences for planning and benchmarking yet consistency in their need of spending objectives is missing not normal for the organizations utilizing conventional costing frameworks.²

Anderson, Shannon W(2005), In this exploration paper, the researcher has expressed that arrangement of association's cost structure with its strategy and the advancement of the establishment of methodology is accomplished through strategic cost management. From this study researcher had examined the strategic cost management in detail.³

Ekibatani MA, Sangeladji MA (2008), In its research paper titled Traditional Vs. Contemporary Managerial/Cost Accounting Techniques Differences Between Opinions Of Educators And Practitioners had talked about the use of costing techniques and there opinion on traditional costing and modern costing techniques.⁴

Kashinath S D (2011), The present examination is an endeavour to give guidance to small scale industry that cost management in general and strategic cost management specifically is an index of business success. The researcher saw that the majority of the units don't perform to best of their capacities basically on the grounds that cost management has not been given sufficient consideration.⁵

In passive consent, Mbogo (2011) demand that prudent management accounting in a few angles, for example, data investigation, mix of training level and managerial abilities of SMEs proprietors and owners will result in an increasingly solid, positive and huge impact on basic decision making which are extremely basic for SMEs development just as survival.⁶

Ahmad.K, Zabri.S.M(2012), In its research paper had tried to understand the management accounting practices in SME'S. There have been the ongoing requires extra research so as to upgrade the comprehension of the appropriation of the management accounting practices(MAPs) in small and medium size enterprises(SMEs). Results for all MAPs likewise demonstrate that a higher utilization by medium firms instead of small firms⁷

Serdar O & Yasemin Z (2013), In their case study had pointed out the use of ABC in cost of quality. Since the 1950s, a lot of consideration has been given on the cost of quality (CoQ) in theory as well as practice. This

¹ Anand, Manoj(2004), A Review of Research on the Theory & Practice of Cost Management. South Asian Journal of Management, Vol. 11, No. 1, pp. 59-95, January-March 2004. Available at SSRN: <https://ssrn.com/abstract=625063>

² Anand, Manoj and Sahay, B. S. and Saha, Subhashish(2004), Cost Management Practices in India: An Empirical Study. ASCI Journal of Management, Vol. 33, Nos. 1-2, pp. 1-13, 2004. Available at SSRN: <https://ssrn.com/abstract=629262>

³ Anderson, Shannon W., Managing Costs and Cost Structure throughout the Value Chain: Research on Strategic Cost Management (October 2005), <https://ssrn.com/abstract=869070>. or <http://dx.doi.org/10.2139/ssrn.869070>

⁴ Ittner, C.D. & Larcker, D.F., (2001), Assessing Empirical Research in Management Accounting: A Value-Based Management Perspective. *Journal of Accounting and Economics* (32): 349-410

⁵ Kashinath S D(2011), Study of strategic cost management in selected small scale engineering units in Pune, B.M. College of Commerce, Savitribai Phule Pune University, i-xii.

⁶ Mbogo, M (2011). Influence of Managerial Accounting Skills on the success and growth of small and medium enterprises in Kenya. *Journal of Language, Technology and Entrepreneurship in Africa*, 3 (1) :109- 132.

⁷ Ahmad.K, Zabri.S.M(2012), THE UPTAKE OF MANAGEMENT ACCOUNTING PRACTICES AMONG MALAYSIAN FIRMS IN SMES SECTOR, *International Conference of Technology Management, Business and Entrepreneurship 2012*, 518-533

study had helped researcher to understand how ABC Can help in improvement of cost of quality & identifying value added and non-value added activities in SMEs.¹

Kaur, Manmeet (2014), In this thesis application of modern techniques like kaizen and target costing is analysed. The organisation selected are large scale organisation. The above study do not consider small scale organisation and other modern techniques.²

Sherif M.H, Remon F.A, Hala M M(2015), This study had helped researcher to understand the application of ABC in construction industry. It also pointed out the benefit of ABC over traditional method of costing³

Rao Y.V, Beg A.B.B (2015), The reason for this study is to investigate cost and the management accounting practices used by manufacturing organizations working in AP, India. The discoveries demonstrate that organizations see conventional cost accounting devices still vital.⁴

Idowu, Eferakeya (2016), This investigation inspects SMEs and appropriation of the management accounting in Nigeria. The objective exclusively is to decide the degree of adoption of the management accounting (MA) methods among SMEs. The examination finds a huge moderate adoption of MA strategies identified with cost accounting frameworks.⁵

Howard, Alan and Glynn (2016) inspected the utilization of the management accounting methods by small and medium-sized undertakings in Australia and Canada. From the above study researcher had understood the factors which affects the management accounting techniques adoption.⁶

Sylvie Berthelot and Janet Morrill (2016), from the study researcher had understood the importance of professional accountant in implementing the strategies in the organisation.⁷

Andres Alegre Regondola (2017), The examination intends to survey the awareness on the strategic management accounting of small medium-sized undertakings in the Kingdom of Bahrain alongside choice making, vital arranging and control process. This study had relied on the judgement of respondents to find out the respondents awareness.⁸

¹ Serdar O' zkan and Yasemin Zengin Karaibrahimog'lu(2013), Activity-based costing approach in the measurement of cost of quality in SMEs: a case study, *Taylor & Francis, Vol. 24, No. 4,420-431,DOI: http://dx.doi.org/10.1080/14783363.2012.704286*.

² Kaur, Manmeet(2014), Adoption and implications of kaizen and target costing techniques a study of selected automobile companies, Maharshi Dayanand University, 1-19.

³ Sherif M.H, Remon F.A , Hala M.M(2016), Optimal Techniques for Cost Reduction and Control in Construction Sites, *Journal of Human Resource Management, 3(3),17-26,DOI: doi: 10.11648/j.jhrm.20150303.11*.

⁴ Rao Y.V, Beg A.B.B (2015), Cost and Management Accounting Practices: A Survey of Manufacturing Companies in India, *International Journal of Research and Development - A Management Review (IJRDMR), Volume-4, Issue-4,*

⁵ Idowu, Eferakeya. (2016). Small and Medium Enterprises (SMEs) and adoption of Management Accounting in Nigeria. *Journal of Social and Management Sciences. Volume 11. 62-76.*

⁶ Howard, M. A., Alan ,W. & Glynn, J (2014). The use of management accounting techniques by small and medium –sized enterprises: Afield study of Canada and Australian Practice. *Accounting Perspective, 15 (1) : 31-69.*

⁷ Sylvie Berthelot , Janet Morrill , (2016), Management Control Systems and the Presence of a Full-Time Accountant: An Empirical Study of Small- and Medium-Sized Enterprises (SMEs), in (ed.) *Advances in Management Accounting (Advances in Management Accounting, Volume 27) Emerald Group Publishing Limited, pp.207 - 242*

⁸ Andres Alegre Regondola(2017), Awareness on Strategic Management Accounting of Small Medium-Sized Enterprises in the Kingdom of Bahrain, *IJSET, VOL 4, Issue-5, 42-46.*

Malkanthi S.N, Premalal A.G.D. and Mudalige R.K.P.C.B(2017), In its paper titled ‘Impact of Cost Control Techniques on Cost Overruns in Construction Projects’, researcher had explained how good cost controlling techniques helps in controlling the problem of cost overrun.¹

Mutya T (2018), The study went for setting up the impact of cost control on association performance with a contextual investigation of Mount Elgon Millers Limited.²

RESEARCH GAP

From the above literature review it has been found that a very limited study is being done on the cost control & cost reduction techniques in SME’S. In fact researcher had not come across a single direct study where the focus is to find out the awareness level of cost control techniques and cost reduction techniques. Most of the study had talked about the application of management accounting techniques in SME’S or adoption of management accounting techniques in SME’s. The review of literature also help to identify the use of modern cost control techniques but the study for the same is limited. Researcher study is different from the above study because

- It will study the awareness level of SMEs about cost control & and cost reduction techniques in and around pune city.
- It will study Suitability organizations structure & and availabilities of expertise to apply the cost control &and cost reduction techniques in and around pune city.
- It will also test the willingness of SMEs for adoption of cost control & and cost reduction techniques in and around Pune city.
- The above parameters are not being researched in detail in all the previous study. In researcher study researcher will consider Auto, Auto Component & and Engineering Sector to evaluate the above parameters. Very few studies are being done in SME’s relevant to Auto, Auto Component & and Engineering Sector in and around Pune city.

Hence researcher had selected the topic “A Study of Cost Control and Cost Reduction Practices of Small and Medium Enterprises (SMEs) in & and around PUNE City with Reference to Auto, Auto Component &and Engineering Sector.”

¹ Malkanthe S.N, Premalal A.G.D. and Mudalige R.K.P.C.B(2017), Impact of Cost Control Techniques on Cost Overruns in Construction Projects, *ENGINEER*, Vol.4, 53-60, <http://doi.org/10.4038/engineer.v50i4.7275>.

² Mutya T (2018) Cost Control: A Fundamental Tool towards Organisation Performance. *J Account Mark* 7: 283. doi: 10.4172/2168-9601.1000283.

INTRODUCTION TO SMART CITIES AND SELECTED LITERATURE REVIEW

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ABSTRACT

Smart City concept is not new but in developing and under developed countries still many people are not familiar with it. Smart City still doesn't have universally accepted definition and many people have defined it with different perspective and views. Sometimes this creates an unnecessary confusion to understand what Smart City is. To have better clarity and to understand Smart City concept well, in this paper an overview of Smart City is provided along with details on Smart City Components and Services. Selected research papers on Smart Cities are also reviewed to identify technology trends and solutions used to design, develop, operate and maintain modern Smart Cities across the globe.

Keywords: Smart City, ICT, IoT, CPS, Simulation

I. INTRODUCTION

Smart City concept is not new in developed countries however many citizens of developing and under developed countries still not much familiar with it and faces challenges in understanding Smart City definition and its necessity in today's world. In reality Smart City doesn't have any standard definition in theory which is accepted by world wide researchers and organization. Many people have explained Smart City concept and proposed different kinds of definitions from different points of view such as technical, social, economical, political, governmental etc. Though these definitions are different from different point of views, researchers and organization however commonly agree to the fact that Smart cities are designed, developed, driven, manged and operated with latest Information Communication and Digital Technologies. Some of the well known definitions of Smart City are listed in table 1 below.

Table 1: Smart City Definitions

Sr. No.	Source	Smart City Definition
1	Techopedia	“A smart city is a designation given to a city that incorporates information and communication technologies (ICT) to enhance the quality and performance of urban services such as energy, transportation and utilities in order to reduce resource consumption, wastage and overall costs.”
2	Times Of India	A city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application of some smart solutions.
3	Wikipedia	A smart city is an urban area that uses different types of electronic Internet of things (IoT) sensors to collect data and then use these data to manage assets and resources efficiently.
4	Smart Cities Council	A smart city is one that has digital technology embedded across all city functions; click on any of the articles below for additional perspectives.

Though well focused and planned development efforts are already going on from last few decades for development of planned cities, however it is realized from last 10 to 15 years that ongoing efforts are not enough and societies are now more demanding and looking for more robust technical solutions for real life problems from residence, infrastructure and commute perspective. I feel that this constant pressure and more demanding nature from societies and city residents to make the life easy and safe must have triggered the thought of digital technology compatible city which is nothing but, in my opinion, a Smart City.

It is not uncommon to expect that Smart City is nothing but one which provides smart services to its citizens to make their life more comfortable, safe and happy. However, it is also about connecting the city residents in reliable and safe way with the government digital governance platform where citizens can consume the services, can give their feedback and improve the services through mutual participation in ongoing basis. And this ultimate aim can not be fulfilled without utilizing the latest technology based solutions specifically from Information Technology(IT), Software Engineering and Information Communication Technologies(ICT).

Smart City is different from traditionally well developed cities and or the way cities were planned and grown. Smart City has brought new trend in setting up and development of cities and applying the governing policies,

rules and regulations through the use of technologies. This enables the citizens to freely access and use digitally available information, various apps providing various digital services related to the city such as various events info, shopping offers, tours and travels related info, tracking and locating address, online admissions to school and colleges etc. Thus Smart City is a place where traditional information networks are replaced with digital services offering more flexibility, more efficient and more sustainable by making the best use of available technologies such as digital and information communication technologies, to improve the overall operations and provide benefits to it's residents. Smart City not only best utilizes the technology to make the citizens life better livable but also cares to reduce harmful impact on environment. Technologies such IOT, Big Data, Geospatial Technology, Artificial Intelligence, Block Chain etc. are making long term impact in smart cities development and operation making them more efficient and more innovative and creative.

In figure 1 below, the typical model representing smart city concept is shown. As shown in the figure, the key ingredients of smart city are shown around the basic residence infrastructure of a city and presented as a collection of paradigms spread among different domains such as people, processes, governance, mobility, environment and better living facilities such as residence buildings, education institutes and medical facilities.



Figure 1: Smart City Model (Monicaodo - Dreamstime.com)

Smart City thus facilitates and responsible for lot of functionalities under one umbrella including traffic flow analysis and necessary optimization, incident monitoring and reporting, public transportation, utilities monitoring, carbon foot print measurement and monitoring, smart governance, smart power management, best optimized natural resource utilization, smart water management, smart waste management and so on. Please refer figure 2 which has presented the essential capabilities of Smart City. Housing, medical facilities, education, transportation, governance services, citizens safety and security and other such essential services enabled and efficiently operated using advance technology based solutions ensures livability for citizens and also offer economic opportunities for cities to attract and empower citizens of all age groups including senior citizens. Smart City technologies when used wisely and with planning can alter the city infrastructure and the ways the digital services are deployed. These technologies also offer good opportunity to accommodate expectation and desires from ageing communities and disabled communities. All the stakeholders of Smart City thus can ensure that offered services are inclusive.



Figure 2: Smart City Capabilities (Panagiotis Tsarchopoulos, 2017)

II. SMART CITY ICT COMPONENTS

As cleared from the Smart City introduction, it is confirmed that for deploying all the essential services to make the city residents life more enjoyable and comfortable, Smart City heavily relies upon technology driven solutions. IT, ICT and Digital technologies are playing crucial role in solving real life problems faced by Smart Cities. Let us explore such technology based components for Smart Cities. Refer figure 3 below, which is presenting all the essential components of ICT which directly assist Smart City meeting and fulfilling its many of the objectives. Though the figure has only listed essential ICT Actors, the list in reality is very exhaustive and will continue to grow depending upon the ICT revolution and its implementation across multiple domains. The list is also going to accumulate the new elements in line with industry 4.0 generation.

The smart ways of managing the things required acquiring the relevant data from various sensors, necessary data monitoring and analysis. The relevant data analytics from smart management of various services enables the city governance to make relevant improvements in infrastructure, super asset management and overall effective control on all the relevant resources. For this purpose, a smart city must include key components such as secure centralize server, safe way to access the data through mobile apps or simple secured websites and powerful hardware platforms to drive this IT Infrastructure. With such facilities the citizens can then freely and securely access the systems and subsequently required data and this can happen in two ways where citizens can also upload and update the relevant information in real time. By enabling the relevant controls citizens can contribute in information sharing and can collectively fulfill the combine aim of smart city governance.



Figure 3: Smart City ICT Components (Margaret Rouse, 2017)

III. How cities can be smart

The systematic definition of Smart City is “a city in which its social, business, and technological aspects are supported by Information and Communication Technologies to improve the experience of the citizen within the city. To achieve that, the city provides public and private services that operate in an integrated, affordable, and sustainable way.” Thus, the smart city's basic aim is to have an an integrated as well as collaborated environment to facilitate interoperability, participation and enhancements among city’s sub-systems. Making City Smarter is an evolving and ongoing activity and it is necessary that the shared services must be integrated under unified technology infrastructure.

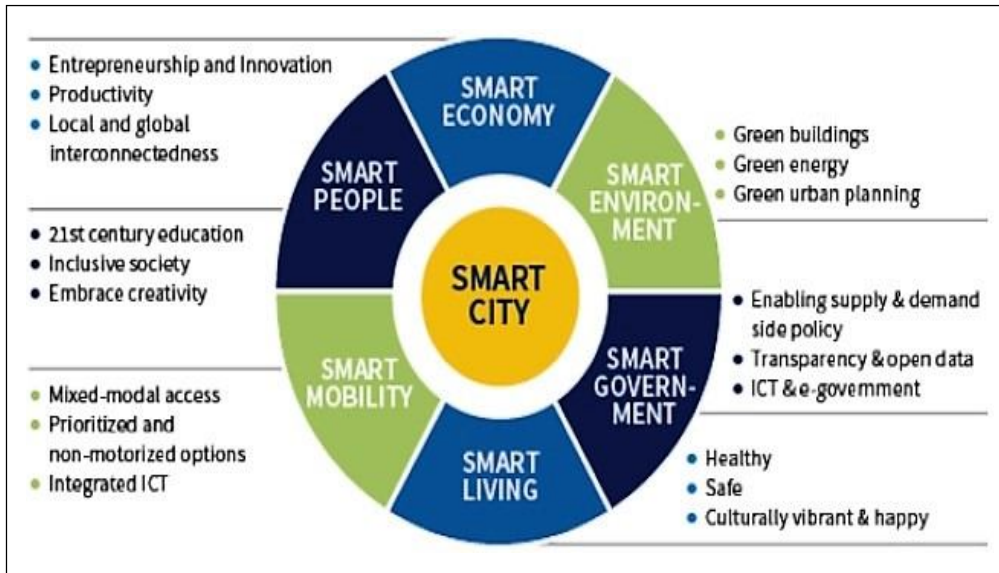


Figure 4: Smart City Features (Boyd Cohen)

A more sensible way to make this reality is with a well-thought of and designed, robust software platform providing the essential infrastructure for dealing with huge volumes of data, a wide variety of software devices, platforms and applications, interoperable systems, and other issues related to Smart City environments.

Refer figure 4 above which has shown the 6 essential features any smart city must have. The smart city is built on the smart combinations of enabling these features. For smart and sustainable growth of a city, it is important to promote a more efficient use of available resources, reliable data analysis, robust technical infrastructure, a competitive economy and continuous innovation. For better performance, smart city depends upon advancements in software engineering field and uses digital and information communication technologies to enhance quality of the offered services to make citizens lives better. All the stakeholders of Smart City including administration and management officials are provided with better technology driven ways to connect with each other and take rapid action as and when required. Continuous small steps are being taken towards the final goal, Smart City, by providing & continuously improving on the Smart Living aspect of it.

IV. Literature review of selected research papers

Worldwide scientists, research scholars, Industry SMEs have put lot of efforts in proposing and implementing various innovative solutions to address the real life challenges faced in developing Smart Cities. Lot of good research papers, white papers, presentations, thesis and books are available online as well as in printed form elaborating in detail the Smart City concept, systematic steps in implementing and maintaining Smart City infrastructure and solutions based on advanced technologies to meet specific features and functionalities Smart City needs to fulfill. Following are some selected research papers reviewed to gather more information about Smart Cities, its technology trends, Smart City Services, its challenges and Solutions.

[1] Agatha: Predicting Daily Activities from Place Visit History for Activity-Aware Mobile Services in Smart Cities by Byoungjip Kim et al (2015)

For any Smart City to smartly function, many digital services are used such as city planning, transportation, administration, location mapping and so on. Number of digital services are increasing day by day according to the larger requirements of Smart Cities. In this paper Authors have shared details of new digital service for citizens of Smart Cities that is place-history-based activity prediction system called as Agatha. This service will be mobile app based. While people moves around city the GPS enabled Smartphone installed with Agatha Service App will collect location coordinates of the place visited by the user, time stamp the event for In and

OUT information. This data will be then processed, and the system will extract the place visit history of the user and on that can predict the user's likely activities in and around city using machine learning techniques. Authors have claim that this new service of place-history-based activity prediction can be very useful for Mobile Advertising and for recommending the users specific other services and information such as best dining out nearby or entertainment event happening nearby or even information related to forth coming events in such places where user is expected to visit in nearby future.

[2] Analysis and assessment of a knowledge based smart city architecture providing service APIs by C. Badii et al (2017)

Smart City development faces many of the issues and challenges where one of the main challenge is related to collecting data generated from various services, analyzing it and generating meaningful conclusion out of it. Also, Smart City service effectiveness depends upon its capability of collecting the relevant data and passing it to its stakeholders reliably and accurately. To meet this challenge, authors have proposed a robust solution for data aggregation and for Smart City API. This work was performed by the authors in the context of Sii-Mobility smart city project on developing the smart city architecture addressing huge data processing requirements. The authors proposed solution by aggregating and re-conciliating all types of generated data including real time, static, openly available as well as private services data by using smart algorithms for enabling Smart City API sophisticated service delivery.

[3] Thinking about smart cities by Amy Glasmeiera and Susan Christopherson (2015)

In this paper, author went through the various definitions of Smart City and came forward with different perspective about Smart City keeping in mind the two essential attributes. These two essential attributes are: technology driven and living experience in urban places with new reality. Author has discussed about the various expectations from citizen about Smart City and elaborated their thoughts throwing light on following

- Better equipped infrastructure of Smart City for smarter Cities
- Are Smart City resident real beneficiary from Smart Cities?
- Can Smart City movement fulfills the better urban living expectation from its citizens

Authors feel that the Smart City Development process should be well thought of and conducted through collaborative research. While doing so following questions shall be answered

- The capabilities and constraints of technologies used in development of Smart Cities
- Application deployment conditions such as scale, market size, density and proximity and finally
- Applications marketability

Authors have also raised concerns stating that many of the smart cities will need to be developed from scratch considering the possibility that many of the people will move from rural areas to Urban for exploring better employment opportunities and better liveable experience. In such cases it is extremely important to consider essential resources requirements such as water, transportation, waste management, electricity, housing, medical facilities, education facilities etc.

[4] Smart Cities as Cyber-Physical Social Systems by Christos G. Cassandras (2016)

The Smart City network infrastructure consists of network of sensors and actuators embedded throughout the urban terrain and Smart City services, interacting with smart phones, tablets and laptops. All these devices and or nodes are finally interacting with cloud services offered via internet. In this paper authors have correlated the smart city architecture with Cyber Physical Systems (CPS). Authors have successfully argued that the data collected and flowed through various network nodes in Smart City may involve data related to traffic signals information, traffic flow information, parking availability information, vehicles monitoring and location coordinates, water and air quality related information, emergency related information. Under such conditions data reliability, accuracy and availability of information is key requirement which demands a robust CPS infrastructure equipped with new software platforms adhering to strict standards of mobility, safety, security and data privacy. In this paper authors have discussed key characteristics of Smart City and discussed following lessons learned by viewing Smart City as CPS.

- Smart City CPS shall treat Smart City as close loop system and not just the architecture data collecting and distributing among various digital services

- Instead of numerous applications, implementing a user-friendly platform for accumulating and data distribution can have major impact
- Just technology alone cannot transform any city into Smart City. Participation and involvement of human beings in managing and running Smart Cities is more important and essential and hence in developing any CPS human being behaviour and role should also be considered.

[5] Algorhythmic governance: Regulating the ‘heartbeat’ of a city using the Internet of Things by Claudio Coletta and Rob Kitchin (2017)

In this Paper, authors have discussed how the IOT infrastructure with its associated network of sensors and actuators can be used to regulate, measure and monitor the polymorphic temporal rhythms of urban city life. Authors have developed a concept of ‘algorhythmic governance’ by employing rhythm analysis in conjunction with Miyazaki’s notion of ‘algorhythm’ and nascent work on algorithmic governance. Authors have also successfully demonstrated the concept of ‘algorhythmic governance’ through two case studies on Traffic Management System and Sound Monitoring and Modelling. Through this study and discussion authors analysis has revealed following

- Various distinct forms of algorhythmic governance
- Practical applications and working style of algorhythmic governance works in practice and
- How Smart City technologies perform, computationally rhythm analysis and undertake rhythm-making that intervenes in space-time processes

[6] Simulation Game as a Reference to Smart City Management by David Wiselia et al (2017)

In this paper authors have proposed simulating the Smart City aspects such as related to Citizen, Environment, Traffic, Welfare, Economy, Technology etc. and its associated problems in game fashion to make Smart City stakeholders aware of and understand the problem-solving techniques and solutions in efficient manner. Authors have discussed in detail the influence on the stakeholders from playing a game for City Management skills acquiring and better planning on what needs to be done first and in what order. Authors have claimed that by simulating real life practical problems associate in Smart City management and administration and providing relevant sandbox style of simulated solutions to tackle such problems can offer the game players i.e. Smart City stakeholders better skills, training and learning experience to handle similar kind of challenges in real life. Authors have successfully demonstrated how Smart City aspects can be simulated into game and it can positively influence the people playing this game to take appropriate actions for similar kind of situations in real life while managing the Smart Cities. Authors have concluded that simulation game can be used a successful teaching method by implementing problem and solutions of city management into a game and by allowing the player to solve it.

[7] Software Platforms for Smart Cities: Concepts, Requirements, Challenges, and a Unified Reference Architecture by Eduardo Felipe Zambom Santana et al (2017)

In this paper authors have surveyed the current research on software platforms for Smart Cities and tried to investigate the most relevant requirements to facilitate the development, integration, testing and deployment of Smart City Applications. Based on the analysis and investigations done to explore the highly reliable, effective and scalable Software Platform for efficient running of Software Applications/Services for Smart City, authors proposed a unified reference architecture supporting this prime objective. The paper has provided all the relevant information to help software developers and Smart City stakeholders to handle the non-functional and functional requirements to be fulfilled by software Platform for Smart Cities, classifying them into four categories: IoT, Big Data, Cyber-Physical Systems, and Cloud Computing.

[8] SMArc: A Proposal for a Smart, Semantic Middleware Architecture Focused on Smart City Energy Management BY Jesús Rodríguez-Molina et al (2013)

In this paper authors have argued that among other various functionalities of Smart City, improved energy management is also one of the important functionalities to be analyzed, monitored and fulfilled. To do so, authors feel that Smart Grid Energy management is the best suitable solution since it provides two-way information flow between consumer and provider and this mechanism can boost the energy management enhancement. However, authors also suggested that to use all the generated information effectively a middleware layer is also needed in the architecture which will be responsible for collection and distribution of data among various nodes. To meet this requirement, authors have proposed a Semantic Middleware Architecture named as SMArc. The SMArc layer basically takes care of any changes happens at lower layer of

architecture and insulates applications from complex metering facilities. Authors have also provided the computational and functional analyses to prove the successful functioning of SMArc. Authors have claimed that the SMArc layer can be easily integrated in a Smart Grid without need to be ported or adapted from other contexts.

[9] Securing Smart Cities Using Blockchain Technology by Kamanashis Biswas and Vallipuram Muthukkumarasamy (2016)

In this paper, authors have proposed a Blockchain technology-based security framework for Smart City Architecture to have a secure communication Platform. As the Smart City network is becoming more and more complicated where millions of IOT devices are supposed to be an integral part of Smart City architecture and going to generate huge messages for exchanging among various nodes, in such case safety and security aspects for data communication is an essential aspect to look after. The Blockchain Technology supports crypto currency and is basically peer to peer distributed ledger technology which can record any kind of transactions such as contracts, agreements, sales etc. and it doesn't need any intermediary. The benefit of Blockchain Technology as security framework is that an attacker can't penetrate the system unless 51% of the system is compromised, which is as good as impractical. Also, such penetration attempts can catch the attention of security measures the moment first access layer is compromised. Thus, using Blockchain technology to secure the Smart City Architecture can offer high secured robust security framework which is practically secured to deal with any kind of virtual attack. Authors have proposed security framework via four different layers i.e. Physical Layer, Communication Layer, Database Layer and Interface Layer. Authors have claimed that using Blockchain based security framework can create a common platform which can enable secure data communication in a Smart City and can offer multiple advantages including better fault tolerance capability, improved scalability, faster and efficient operation, better reliability etc.

[10] Video big data in smart city: Background construction and optimization for surveillance video processing by Ling Tian et al (2018)

In this paper authors have proposed new scheme for Video Compression based on block-level boundary matching (BBM) algorithm to support long-term reference structure for efficient surveillance video coding. As the Smart City Architecture is going to use more and more IOT enabled sensors for better surveillance and city administration, it is obvious that huge amount of text and video data is going to get generated and needs to be processed in time bound manner. As video data is bulky, if it is not compressed while transmission from one place to other can seriously pose data processing and data loss challenges. To deal with such issues, authors feels that better compression technique for Video Data is an essential requirement rather than just necessity. Authors have also developed a rate-distortion optimization for surveillance source (SRDO) algorithm to improve coding performance. Authors have further proposed to collaborate the BBM Video Compression technique with rate-distortion optimization for surveillance source (SRDO) algorithm (SRDO) for further improving the video compression performance. Authors have recommended using this newly developed BBM and SRDO algorithms in Video Compression for surveillance video data of Smart City and have also claimed that this technique would require less storage requirement for video data and can offer efficient video data processing for any video applications required in Smart City.

Table 2: Summary of reviewed papers

Paper	Summary
[1]	Agatha is a new Digital Service App for place history based activity prediction system which records users place visit history and recommends them the relevant offers, advertises as per their places of visits.
[2]	Smart City API based solution for data aggregation and reliable analysis for the data generated by various Smart City Services
[3]	Smart City definition considering two essential attributes : technology driven and living experience in urban places with new reality.
[4]	Smart City architecture correlated with Cyber Physical System. The data collected from Smart City Services would require robust CPS infrastructure for data processing and for adhering to strict standards of mobility, safety, security and data privacy.
[5]	The IOT infrastructure with its associated network of sensors and actuators can

	be used to regulate, measure and monitor the polymorphic temporal rhythms of Smart City life.
[6]	Simulation of various aspects of Smart City related related to Citizen, Environment, Traffic, Welfare, Economy, Technology etc. and its associated problems in game fashion can enhance Smart City administration staff's City Management, planning and problem solving skills.
[7]	IoT, Big Data, Cyber-Physical Systems, and Cloud Computing based Software Platform can easily facilitate Smart City stakeholders to handle all including the non-functional and functional requirements for Smart Cities.
[8]	Energy Management is an important functional requirement for any Smart City to fulfill. Authors have proposed a Semantic Middleware Architecture named as SMArc which basically takes care of any changes happens at lower layer of Smart Grid Management architecture and insulates applications from complex metering facilities.
[9]	Blockchain based security framework can create a common platform which can enable secure data communication in a Smart City and can offer multiple advantages including better fault tolerance capability, improved scalability, faster and efficient operation, better reliability etc.
[10]	BBM) and SRDO algorithms can offer better video compression techniques and would be very much useful for Smart City Video Surveillance data compression, transmission over internet and facilitates less storage requirement for video data and efficient video data processing for any video applications required in Smart City.

V. CONCLUSION

In today's world, Smart Cities are emerging as an essential requirement and solution to the problems faced by urban cities. Across the globe the population is growing and this growing population doesn't just need the basic essential infrastructure to support for living rather they are demanding better facilities to make their life more enjoyable and comfortable. Smart Cities with the help of latest technologies based on IT, ICT, IoT, Big Data, Block Chain, Cyber Security, Artificial Intelligence, Image Processing, Machine Learning etc. are able to provide the better facilities to their citizens and can offer smart services such as Smart Economy, Smart Mobility, Smart Environment, Smart Governance, Smart Living, Smart Parking, Smart Education, Smart Medicare etc. Such Smart Services are based on latest technologies and with the help of such services, Smart Cities ensure that their citizens not only just gets better facilities and comfortable life but also an opportunity to participate in running and managing Smart Cities as well give feedback on quality of services offered and improvements needed in Smart City facilities. It is clear that world wide Smart Cities are going to be established at larger scale and larger population is going to get benefited by the Smart Cities.

VI. FUTURE WORK

In present paper Smart City introduction is covered along with review of selected research papers. Due to time and space constraints, more literature available on Smart Cities could not be reviewed. In future, more research papers are needed to be reviewed to explore latest technology based solutions which are used in solving the problems faced by newly established Smart Cities. It is also necessary to analyze and categorize the solutions based on the technologies to understand which technology is being used more often in Smart City development, operation and maintenance. A separate research paper would be required to cover this topic in detail. This is considered as future work and would be undertaken in next stage of research.

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RECENT TRENDS IN INSURANCE SECTORS IN INDIA: A NEW WAY OF JOURNEY IN 21ST CENTURY

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ABSTRACT

The study mainly focuses on recent trends in insurance sectors in India. The Indian insurance industry seems to be in a state of flux. After a decade of strong growth, the Indian insurance industry is currently facing severe headwinds owing to: Slowing growth, rising costs, Deteriorating distribution structure, stalled reforms. Despite strong improvement in penetration and density in the last 10 years, India largely remains an under-penetrated market. The market today is primarily dependent on push, tax incentives and mandatory buying for sales. There is very little customer pull, which will come from growing financial awareness and increasing savings and disposable income. In the long run the insurance industry is still poised for a strong growth as the domestic economy is expected to grow steadily. Thus the study highlighting the recent development stages of insurance industry in India.

Keywords: Life and Non-Life Insurance -Recent Trends-Insurance Policy-Challenges of Insurance Sector-Global Competences

INTRODUCTION

The demand for insurance products is likely to increase due to the exponential growth of household savings, purchasing power, the middle class and the country's working population. Listed below, are the various underlying growth drivers for India's insurance industry: The insurance industry of India consists of many insurance companies of which some of are in life insurance business and are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. Apart from that, among the non-life insurers there are six public sector insurers. In addition to these, there is sole national re-insurer, namely, General Insurance Corporation of India (GIC Re). Other stakeholders in Indian Insurance market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims. Thus, the study includes the recent growth and development in insurance sectors of India

OBJECTIVES OF STUDY

1. To promoting Growing of the insurance industry as a whole
2. To find out the Growth of life and non-life industry
3. To Promoting innovation and removing inefficiency
4. To enhancing Competition and orderly growth at global level
5. To elevate Growth of specific insurance segments
6. To study the recent trends, growth and development in Indian insurance industry
7. To suggest measures for improving the scenario of insurance industry in India.
8. To understand the world insurance density, and relate it with India density.
9. To study the premium trend analysis for understanding improvement of insurance in India.

RESEARCH METHODOLOGY

The research design is of Descriptive in nature & Secondary data is collected from different published journals, manuals, reports and document, IRDA Annual Reports and relevant online sources.

NEED & IMPORTANCE OF STUDY

Multi-distribution i.e. increasing penetration through new modes of distribution such as the internet, direct and telemarketing and NGOs

Product innovation i.e. increased levels of customization through product innovation

Claims management i.e. timely and efficient management of claims to prevent delays which can increase the claims cost

Profitable growth i.e. expanding product range, developing innovative products and expanding distribution channels

Regulatory trends i.e. mandated regulatory changes by the IRDA to promote a competitive environment in both the life and non-life insurance sectors

Stable Profitable Growth- The Indian insurance market is poised for strong growth in the long run. It stands at the threshold of moving towards a stable position, delivering “stable profitable growth.”

Significant latent market - The insurance market has a considerable amount of latent potential, given the fact that the Indian economy is expected to do well in the coming decades leading to increase in per capita incomes and awareness.

Channelizing industry focus - In meeting the significant potential, the industry has an increased role and responsibility. Three areas of focus could be — a) product innovation matching the risk profile of the policy holders b) reengineering the distribution and more significantly c) making sales and marketing more responsible and answerable.

Distribution - Distribution channels evolved in response to market dynamics and changing consumer preferences. The alignment of economic incentives with distribution dynamics should be driven by market forces rather than regulatory intervention.

Regulation - The industry should be given time to adjust to regulatory changes in a phased manner aligned with a regulatory impact assessment. Regulations need to drive transparency and simplification of products and services. The stakeholders should eventually work toward maintaining a favorable environment for stable growth, increasing the penetration of insurance to rural and underpenetrated areas and increasing the contribution to the economy.

RECENT TRENDS AND CHALLENGES IN INSURANCE SECTORS IN INDIA

The regulator has launched a slew of changes and guidelines which have positively impacted the sector in terms of making products and processes more transparent and consumer friendly. As a result, these guidelines have defined the trend for the industry in terms of products, distribution and services.

IPO GUIDELINES FOR INSURANCE SECTOR

The regulator introduced the IPO guidelines for the insurance sector which will help insurers plan their capital raising strategies. More capital would mean more investment in technology leading to higher quality of customer service and more investment towards product development.

As the companies who are going for an IPO will have to mandatorily disclose a record of policyholder protection and pendency of complaints for the last 5 years, we will see a lot of work by all companies in this area leading to improved health of the overall sector and routing out of issues such as mis-selling.

OPEN ARCHITECTURE GUIDELINES FOR DISTRIBUTION

The introduction of the draft Open Architecture guidelines has also set the tone for a new trend in distribution. Open Architecture could enable an insurance company to offer its products at any branch of any bank across the country, through multiple tie-ups. This dramatically enlarges the range of options available to potential buyers of insurance products by increasing insurance penetration into geographies left untapped so far. If a particular life insurer has not launched business in all the branches of a bank, another insurer can launch insurance business in those branches.

INCREMENT FOR LAPSED ULIP POLICIES

Taking forward the theme of Customer Centricity, the regulator has further evolved the ULIP guidelines increasing the time-frame to revive lapsed policies to two years. Insurance is a long-term contract and even if someone's policy has lapsed due to a temporary resource crunch now they can revive it and enjoy the benefits. Despite the headwinds, the insurance sector has been resilient and has launched many new products and customer centric processes in line with the market and regulatory trends.

TRENDS INFLUENCING THE GLOBAL INSURANCE SECTOR

The sovereign debt crisis, natural catastrophes, and volatile financial markets have prodded the global insurance sector to walk a rough path over the past few years. However, the insurance sector was fairly stable, with the promising prospects of the emerging markets carrying it toward the path of recovery, albeit slowly. Insurers too have adopted several prudent capital management techniques that have helped restore balance sheet strength to pre-crisis levels. The global economy is expected to improve, providing further impetus to the insurance sector. However, low interest rates, evolving regulations, and complex product mix will pose new challenges—bringing out the following four trends in recent years

INSURERS WILL SEEK RISKIER ASSETS TO BEAT LOW INTEREST RATES

Traditionally, insurers invested in domestic sovereign bonds with low exposure to other asset classes. However, the low interest rate—especially in developed markets—significantly intensified their need to diversify their investment portfolios. The pressure further grew due to the high guaranteed rates of existing policies and the competitive pressures that forced some companies to promise higher returns. As a result, insurers have started exploring new sources of long-term, high-return investments either in-house or through outsourced asset management even if it comes at the cost of higher risk and volatility. These changes will have far-reaching effects on the terms of capital requirements, disclosure policies, reporting standards, and risk management. They will improve transparency and provide incentives to de-risk insurance products, thus improving the sector outlook. However, due to stringent capital requirements, companies will be required to maintain more reserves building pressure on profitability.

NEW RISK MANAGEMENT TECHNIQUES AND IMPROVED MONITORING

Driven by the evolving global regulations and customer expectations, insurers are investing in building technology and processes for better risk management and monitoring. In order to comply with the increased regulations and to tap attractive-cum-risky asset classes, insurers are increasingly focusing on new hedging strategies.

DATA ANALYTICS TO ENHANCE UNDERWRITING PROFITABILITY

In a bid to improve their underwriting margins and retain profitable customers, insurance companies have turned toward data analytics. Insurers have access to large volumes of data related to customer transaction and claim history, known as traditional data. Insurers are integrating this traditional data with non-traditional data such as lifestyle and purchasing patterns, obtained from external sources to gain competitive advantage. Therefore, insurance companies have started making heavy investments in data management and analytics to gather insights about customer behavior and preference. Increasing use of data analytics can help insurers.

GOVERNMENT INITIATIVES IN RECENT YEARS

The Government of India has taken a number of initiatives to boost the insurance industry. Some of them are as follows:

1. The Insurance Regulatory and Development Authority (IRDA) of India has formed two committees to explore and suggest ways to promote e-commerce in the sector in order to increase insurance penetration and bring financial inclusion.
2. IRDA has formulated a draft regulation, IRDAI (Obligations of Insurers to Rural and Social Sectors) Regulations, 2015, in pursuance of the amendments brought about under section 32 B of the Insurance Laws (Amendment) Act, 2015. These regulations impose obligations on insurers towards providing insurance cover to the rural and economically weaker sections of the population.
3. The Government of India has launched two insurance schemes. The first is Pradhan Mantri Suraksha Bima Yojana (PMSBY), which is a Personal Accident Insurance Scheme. The second is Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), which is the government's Life Insurance Scheme. Both the schemes offer basic insurance at minimal rates and can be easily availed of through various government agencies and private sector outlets.
4. The Uttar Pradesh government has launched a first of its kind banking and insurance services helpline for farmers where individuals can lodge their complaints on a toll free number.

PROBLEMS OF STUDY

1. In India many people were illiterates so they don't know about insurance benefits and they don't know what are the existing insurance policies which were giving more benefits
2. In India more than 45% people were living below poverty line and they could not even thing about the insurances.
3. In the initial stages there was a rumor that insurance is a death policy and it can be claimed only after the death so no one showed interest in insurance.
4. In the beginning stages of insurance there was less awareness about insurance policies
5. The insurance agents are not succeeding to that extent in motivating the people about insurances and insurance policies
6. Still many business organizations and manufacture organizations are not showing interest

7. to insure their property.
8. Claim settlement is also one of the backdrops because of late process in claims

SUGGESTIONS AND RECOMONDATION

1. There should be many developments in the insurance sector in the recent future years.
2. Every sector has expected to grow at a fast pace in the coming years, with increasing awareness and penetration levels
3. Insurance players will help in taking the sector to the next level of growth at global market
4. IRDA has to frame the new regulations according to changing scenario of insurance sectors
5. There must be promotion and introducing of new policy for the benefits of customers
6. There must be continuous changes in insurance sectors as per the needs of customers
7. The insurance repository system has to help in easier manner for maintenance of policies
8. Opening more number of insurance institutions and introducing different courses according to recent development in insurance industry.

CONCLUSION

The insurance Sector is one of the most competitive sectors in India today. The Insurance Regulatory and Development Authority of insurance players to promote the policy holders and the growth of the insurance sector. The insurance sector is continuously evolving and requires continuous changes by the government and the regulator to be competitive. Access to international best practices and entry of mature players in the industry will help in the strategic development of the sector. On the regulatory front, IRDA has recently brought about several changes. Another development in the sector is the introduction of new guidelines by IRDA with respect to Unit Linked Insurance Policies (ULIPs). IRDA has made the product attractive for investors by reducing the charges further. Regulating a unit linked product was the need of the hour to protect policy holders' interest. Another innovation in the sector is the advent and popularity of online term plans. Portability of health insurance policies is another development brought about by IRDA in the recent past years. The regulator has constantly worked on improving transparency and protecting policy holders, while at the same time bringing about forward looking policies to promote the growth of the sector. Going forward in future years, the insurance sector is expected to see changes in the operational as well as ownership levels. New players could enter the market, while existing smaller players can be taken over by the larger players. Despite growing penetration levels over the past decade, India remains a largely under penetrated market as far as insurance is concerned. The range of product offerings is also expected to increase in recent years. Proactive policies by the regulator and the government, increasing customer awareness, making operations efficient, innovative products and bringing about customer centric products and services will help in taking the sector to the next level of growth in insurance sector in India.

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INSURANCE SECTOR IN INDIA: A CHALLENGES AND OPPORTUNITIES IN 21ST CENTURY

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ABSTRACT

This paper deal with challenges and opportunities of the insurance sector in India. Insurance sector in India is growing at a faster rate. It also contributes in economic growth and employment. In the post liberalization period, it has opened to the private players. With many players in business, the insurance regulatory and development authority came with innovative and constructive guidelines for both products and services. The paper also highlights the phenomenal growth experienced recently, in line with the country's improving economic fundamentals. By comparing growth, penetration, density and other insurance variables, the technology and investment knowledge were the key to success. Not only it was tough to convert from traditional to Unit linked products but also it was a challenge to keep the profitability. Customer preference, stiff competition and regulatory control are major challenges for this sector. India is still an underdeveloped insurance market, it has a huge catch-up potential. Even though there is strong potential for expansion of insurance into rural areas, growth has so far remained slow. Considering that the bulk of the Indian population still resides in rural areas, it is imperative that the insurance industry's development should not miss this vast sector of the population. Insurance in any company is regarded as a pillar of growth and it works as a catalyst in the overall development of the economy. Many industries are entering in the Life and General insurance business in India. This paper discusses the challenges that the insurance industry is facing in India.

Keywords: Insurance, Regulator, Life insurance, General insurance, Challenges, Opportunities

INTRODUCTION

The insurance industry in India has come a long way since the time when businesses were tightly regulated and concentrated in the hands of a few public sector insurers. The insurance industry in our country is on the threshold of a new era of rapid expansion. A more competitive environment is emerging with new participants entering the insurance industry. We need specialists who can work in insurance industry. Risk management has wide applications. Insurance Regulatory and Development Authority Act in 1999, India abandoned public sector exclusivity in the insurance industry in favors of market-driven competition. This shift has brought about major changes to the industry. It is relevant not only to insurance industry but also to many other organizations in the fields of business and finance. In the post liberalization era, insurance development has seen the entry of international insurers, the proliferation of innovative products and distribution channels, and the raising of supervisory standards etc. insurance has attracted many private players from different parts of the country also to start business in India. A more competitive environment is emerging with new participants entering the insurance industry. Insurance is a contract, represented by a policy, in which an individual or entity receives financial protection or reimbursement against losses from an insurance company. Insurance is a means of protection from financial loss. It is a form of management of risk primarily used to cover against the risk of a contingent, uncertain loss. An entity which provides insurance is known as an insurer, insurance company, or insurance carrier. In the developing economies, because of the savings component and the long nature of the contract, life insurance has become an important instrument of mobilizing long-term funds.

OBJECTIVES

1. To commit high standards of service to customer
2. To promote better, more informed relations between costumer and company
3. To maintain and promote trust and confidence in the general and life insurance industry
4. To provide fair and effective mechanisms for the resolution of Complaints
5. To financially guard against unpredictable life occurrences.
6. To purchase protection from monetary repercussions related to things like accidents, illness or even death

REVIEW OF LITERATURE

Kundu (2003) in his article discusses the various issues in the insurance industry after the entry of new players. India has a low insurance penetration of 1.95 percent. The saving rate in India is 25 percent but only less than five percent is spent on insurance. The market is witnessing a wide array of products from new players. The profile of the consumer is also changing. People are looking for integrated financial solutions that can offer stability of return along with total protection.

Malhotra Committee (1993) headed by former Finance Secretary and Reserve Bank of India (RBI) Governor R.N.Malhotra, was formed to evaluate the Indian insurance industry and recommended its future direction. The Malhotra committee was set up with the objective of complementing the reforms initiated in the financial sector. Reviewing “Malhotra Committee Report” it states that reforms were aimed at “creating more efficient and competitive financial system suitable for the requirements of the economy keeping in mind the structural changes currently underway and recognizing that insurance is an important part of the overall financial system”.

S. Krishnamurthy (2005) points out that the life insurance industry has shown extremely satisfactory results in terms of premium income and new policies sold but a huge potential still remains unexploited. Experience suggests that consumers still favour insurance as a saving tool. There is a need to change the perception of Indian consumers towards insurance and it is the responsibility of the distribution channel to advise and educate consumers.

TYPES OF INSURANCE

Broadly there are two types of insurance Life insurance, which may be a term insurance, money back policy or an endowment policy and General insurance which may be covering motor vehicles, home, medical, commercial, personal accident, travel, etc

CHALLENGES OF INSURANCE SECTOR IN INDIA

Cut Threat Competition: Liberalization will create acute competition in the insurance market. Fierce competition to increase volume and market share will continue as more and more players join the race for the greater Indian insurance.

Management: Customer behavior will be influenced by environmental factors as well as intrinsic personal aspirations. The environmental factors are socio economic and demographic factors, inputs of insurance advisors, the company’s efforts to manage customer satisfaction and experience.

Distribution of Products: Segmentation of markets, selling segment oriented products, focusing on fuller satisfaction of customer’s aspiration misstates multiple distribution net works. While the traditional channel of tied up agents or advisors would be the most important distribution channel, insurers should innovate and find new methods of delivering products to customers.

Risk Management: With the environment changes in the economic scenario of the country the risk landscape has undergone significant changes. With the opening up of economy and the entry

of MNC in almost all sectors, there has been a surge in the income levels, especially in the middle class. The globalization has also resulted in cultural exchanges more than in the past.

Untapped Market Segments: It is important to increase the customer base in semi-urban and rural areas which offer a huge potential. The fact that a major chunk of business for LIC comes from these areas stand as a testimony to this indisputable fact. There are difficulties in approaching this segment which will take us back issues of customer education.

Relationship Management: The relationship management of insurance companies is mainly trapped by individuals as well as corporate agent. The relationship of the clients should be ever maintained, but the mistakes of the agent are the major causes in the relationship management.

Human Resource Management: The insurance market is now filled with players, who are mature, globally prominent and big players in the Trans- Nationally competitive global competitive insurance market. Each of them has ability to influence the market. The human resource competency will be another big challenge.

Managing the Regulatory Authority: As the competition acute, the customer becomes more vulnerable to the vagaries on market environment. The regulators have a dual responsibility. They has to ensure that the insuree adhere to sound insurance principles and practices as well

as maintain adequate financial resources to meet their liabilities.

OPPORTUNITIES OF INSURANCE SECTOR IN INDIA

Promote Awareness: It is necessary to promote more awareness among public about insurance. Because the level of insurance penetration is very low. Customer needs a good deal of customer education in which the insuree have to invest a lot of their resources in terms of time, effort, infrastructure and money. Though a knowledgeable customer is a challenge for the company to convince and sell a product to him, the brighter side is that his awareness had brought him to the threshold of insurance.

Multiple Channels of Distribution: Distribution being a key determinant of success for insurance companies. Because at more number of distribution channels the insures have a large database of their disposal. By data mining prospects can be accurately together for business. Linking insurance with allied finance products like housing loan, mutual fund investment in companies, banks credit cards etc are the new channels for life insurance. It is definite that the new channels will help the insurance companies to reach out farther, wider and deeper.

Professionalism in Insurance

Marketing: There are quality insurance advisors in this field due to the passing of IRDA bill. To obtain an agency license training and written test are necessary. Many educated youth, retired officials are taking insurance agency as a career. They guide the customers so that they can select products according to their need, rather than to force selling.

Huge Untapped Market: There is a lot of untapped market in the country. This gives space for all players to grow and expand the insurance industry. Middle class people are having more awareness than the lower class and high class people. They want to provide money for the education and marriage of their children and also to meet their old age needs. So there is market expansion for pension plans and child career plans.

Threat to Health and Life: People die due to natural calamities and terrorism unexpectedly. The environmental pollution affects the health of mankind. In cities people got employment in industries like IT, ITES etc. Due to heavy work and occupational stress they get diseases. Hence there is a growing need for these people to go for different kinds of insurance.

Regulations of IRDA: IRDA regulations enacted for the protection of policy holders interest has also set out the bench marks for servicing, settlement of claims, grievance redressal and so on.

It also contains matters relating to disclosures in proposal for insurance, statutory content of a insurance document, duties and responsibilities of the agent etc. The IRDA watch the insurance companies always. So the companies cannot provide deficient customer service

CHALLENGES AND OPPORTUNITIES FOR YOUNG MEMBERS IN INSURANCE INDUSTRY

Insurance is the fastest growing sector in India and it has huge potential of growing further and further in future. As per an estimate, approximately 21 lakh insurance professionals will be required by 2025. The insurance industry employs a wide array of professionals. Privatisation of the insurance sector has opened many opportunities for Chartered Accountants in this sector. A Chartered Accountant may explore these opportunities as an independent consultant, practicing professional, in actuarial services, product development, surveyor and loss assessor, arbitrator, investigator, regulatory compliance services, third party claim administrator, reinsurance management services, portfolio management services, etc., by joining as an employee of the insurance company. The Insurance sector, which is one of the fastest growing sectors in India, is brimming with opportunities for young professionals. Increase of FDI limit from 26% to 49% will further boost foreign investments in India in this sector and open the gates for new entrants. According to the recent survey conducted by the Confederation of Indian Industries (CII), the estimated number of insurance professionals required by 2025 will be approximately 21 lakh. Given the complex product design, distinctive processes, unique valuation techniques for reserves, liability, provisioning and industry specific financial reporting, it is challenging for young Chartered Accountants to get hold of these quickly. Despite this, there are some jobs that can be taken up by the newly qualified chartered accountants with no prior industry experience but still there are some jobs that requires an expert or a specialized knowledge for which a host of professional courses are available. The post qualification diploma course 'DIRM' can be taken up by aspiring chartered accountants willing to enter this industry

CHALLENGES AND OPPORTUNITIES FOR YOUNG CA'S IN INSURANCE SECTOR

Actuarial Services: The role of an Actuary requires specialized knowledge to assess the financial impact of a future uncertain event. They use advance statistical and financial models to solve complex financial problems which further helps in designing and determining pricing of an insurance product. The role includes Statutory Valuations and Reporting, calculation of Statutory Reserves, Embedded Value Reporting, Experience Analysis, Reinsurance Pricing Model and Capital Modeling. A Chartered Accountant with sound knowledge of statistics and mathematics can take up this profession. This is a statutory profile in the insurance company and requires excellent technical and analytical skills for which Chartered Accountants are well known in the industry.

Insurance Advisory Services: Insurance Advisory Services plays an important role in designing and implementing an insurance programme for a business entity in alignment to its overall insurance objective and

risk mitigation strategies. A Chartered Accountant having complete information of the financial position of the client and its associated risk can further add value in devising an insurance strategy for effective risk management. He can advise his client/employer regarding the selection of policy, need, adequacy and legal requirement of insurance, cost benefit analysis of different plans of different companies. A Chartered Accountant in practice is permitted to render Insurance Financial Advisory Services as prescribed under "The Insurance Regulatory and Development Authority (Insurance Brokers) Regulations, 2002" only in the Corporate form.

Product Development: One of the most important objectives of an insurance company is to provide a comprehensive suite of products that fulfill all the customer needs. The quality and diversity in the portfolio of products and services that is offered to the customers and its profitability, measures a company's effectiveness and sustainability in the market. A Chartered Accountant as a product development professional can design insurance products by matching product specification to the needs of the target customer segments and pricing it accurately with a bias towards objective of long term savings and protection to increase overall profitability from the product while reducing risk and cost

Surveyor & Loss Assessor: Surveyors and Loss Assessors (SLAs) assess the losses in the general insurance business when contingency insured under the contract of insurance arises. A Chartered Accountant with thorough knowledge of business, financial and valuation technique can act as surveyor and loss assessor. He evaluates liability of an insurance company in respect of a an insurance claim.

Arbitrator: Arbitration is alternative dispute resolution mechanism through which parties can resolve their dispute without filing case in the court. In arbitration, there is no strict rule of procedures or law of evidence but still it is legally binding like court order. A Chartered Accountant can act as an arbitrator between insurance company and policyholder to resolve dispute about the eligibility of claim and quantum of losses.

Investigator: An investigator examines the facts of the insurance claim, determines its authenticity & assesses the liability of the insurance company. He ensures that the claim is not fraudulent by gathering background information about the claimant and loss in question. A Chartered accountant can act as an investigator in commercial claims arising in general insurance business as he possess sound knowledge of business and associated risks. It is permissible for a Chartered Accountant in practice to accept an investigation assignment as the work of investigation is akin to audit.

Third Party Claim Administrator: A third party administrator is an outsourced arrangement by the health insurance company to process claims on its behalf. A third party administrator evaluates the claim, assess the liability of insurance company under the contract and settle the claim of the policyholder. A Chartered Accountant can play the role of third party administrator for the insurance company to process the insurance claims.

Regulatory Compliance Services: Regulatory compliance services enable the insurance company to comply with the regulatory requirements by assisting the company to design its compliance policy, periodic assessment of the processes to ensure there is no non compliance to the regulatory requirements. A Chartered Accountant possesses sound knowledge of applicable laws and his ability to interpret the intention of regulation makes him suitable for this profile. He can also support the creation and implementation of comprehensive compliance policies in line with the regulatory requirement. Further, he can also provide support in establishing a comprehensive and robust risk based due diligence process to identify any trends or patterns and highlight any red flags so that corrective action can be taken.

Reinsurance Management Services: Reinsurance is an arrangement with reinsurance company, which takes on all or part of risk covered by a insurance company in consideration of premium. Through this arrangement insurance company safeguards its capital, reinforces financial stability, enable to cover larger risks and guarantees timely settlement of claims. A Chartered Accountant can play an important role in the administration of reinsurance treaties, calculation of premium payable and & evaluation of liability of reinsurance company basis claims submitted.

Insurance Broker: An insurance broker is an independent insurance agent who represents the buyer instead of the insurance company and works with many insurance companies to find the best available policies for his clients. A Chartered Accountant can work as an insurance broker in corporate form. However, he is not permitted to do any work relating to the insurance agency either individually or in partnership/ proprietorship form or in corporate form

Portfolio Management Services: A Portfolio manager advises or undertakes on behalf of the client, the management or administration of a portfolio of securities or the funds of the client. A Chartered Accountant can undertake portfolio management service of an insurance company either as an independent consultant or as an employee of an insurance company. However, a practicing Chartered Accountant is not allowed to undertake these services

Financial Planning and Budgeting: Financial planning and budgeting activities in an insurance company involves preparation and continuous monitoring of a company's annual operating and capital budgets. On the revenue side, sales volume is projected basis the company's revenue targets, external market conditions etc. A Chartered Accountant having sound knowledge about the cost structure of the company can play role in the planning & budgeting exercise.

Expense Management & Cost Rationalization: Cost management is the process by which companies control and plan the costs of doing business. With proper implementation, this process translates into reduced costs of operations for products and services, as well as increased value being delivered to the customer. A Chartered Accountant well versed with cost environment in the insurance industry can work towards implementing the three "E"s - Economy, Efficiency and Effectiveness and thereby achieve cost rationalization.

Technology-Innovation for Growth: Rapid changes in Information Technology (IT) have resulted in rapid changes to the ways in which businesses are operated. Those companies which take advantage of technology as key driver for innovation always achieve competitive advantages over the competition. A Chartered Accountant can drive changes in the business model, product and services through innovation and can play a pivotal role in enabling innovation by demonstrating willingness to accept risk while supporting and rewarding innovative ideas and approaches.

OTHER CHALLENGES FACED BY INSURANCE COMPANIES TODAY

With the beginning of this new business era, development of insurance industry saw a rise of new products and distribution channels which promoted rapid growth of the industry. Dealing with complications is the most the essential functions of insurance. With the raising business Competition, the insurance industry should frequently evolve to focus on new types of risk regularly. In this competitive era, modification in any business environment demands a deep knowledge, clear understanding as well as proper awareness of the specific issues, so that effective strategies will help to alleviate their impact on business growth.

- 1. Lack of Qualified staff:** insurance industries need to invest in talent and managing age concentrations to ensure stability in leadership, production and client servicing.
- 2. Disruptive technology:** Insurance agencies need to focus on streamlined technologies and workflows that will allow you to maximize outputs while still providing outstanding results to your clients.
- 3. Increasing workload of insurance back office operations:** Managing insurance back-office operation with core business activities simultaneously is challenging and time-consuming. Well, in that case, it is a great idea to offload some of the work outside in order to free yourself from non-core activities and focus on revenue generating tasks.
- 4. Technology and big data:** Turning the promise of new technology and big data into commercial successes. This includes capitalizing on the opportunities by using big data and predictive analytics effectively and overcoming the problems associated with legacy technologies
- 5. Cyber Security:** Cyber security is the main concern in these days because people spend more and more of our time on the internet, a risk is shifting accordingly. Cyber insurance tends to cover the practical impact of dealing with a data breach, such as the costs of investigating what has happened and notifying those who have been affected

SUGGESTIONS

1. The insurance market has a considerable amount of latent potential, given the fact that the Indian economy is expected to do well in the coming decades leading to increase in per capita incomes and awareness.
2. In meeting the significant potential, the industry has an increased role and responsibility. Three areas of focus could be product innovation matching the risk profile of the policy Holders, reengineering the distribution and more significantly, making sales and marketing more responsible and answerable.
3. Distribution channels evolved in response to market dynamics and changing consumer preferences. The alignment of economic incentives with distribution dynamics should be driven by market forces rather than regulatory intervention.

4. The industry should be given time to adjust to regulatory changes in a phased manner aligned with a regulatory impact assessment. Regulations need to drive transparency and simplification of products and services.
5. The stakeholders should eventually work toward maintaining a favorable environment for stable growth, increasing the penetration of insurance to rural and underpenetrated areas and increasing the contribution to the economy.
6. Advanced knowledge in the insurance is to be imparted to the employees in Insurance industry.
7. “Digitalization and Relationship” is to be kept in policy marketing.

CONCLUSION

Insurance sector plays an important role in the financial sector of a country. The marketing strategy should be laid out in such a manner that it includes the requirement from the launching policy till the final stage when it reaches in the hand of customer, means the service provided to the policy holders or the end users. It should be planned accordingly, suiting the Indian society, because it is a diversified one from high income group of the low one. The new entrants in the insurance business sector should take pains and understand peoples demand and needs and transform their policies as per their choices. They should be designed to provide the facilities to customers as to give the customers full reliance and satisfaction. In meeting the challenges and making the best of the opportunities lies the future of the Indian insurance companies.

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AN ANALYTICAL STUDY ON PUBLIC HEALTH CARE EXPENDITURE OF MCGM FROM 2010-11 TO 2019-20

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ABSTRACT

A sound and efficient health care system helps in improving a nation's wealth by ensuring a speedier economic growth and development. Healthy citizens are a prerequisite to build an economically viable society and form the basis of a nation's social infrastructure. India still has a very long way to go in providing basic health care to the citizens, as the low levels of health care expenditure have led to a state of deficiencies in then health outcomes of a majority of the country's population. Low levels of investments can affect the quality of services provided by the public health care system. In India, public health expenditure is incurred by the Central and State authorities and also by the Local bodies like the municipalities. Brihanmumbai Municipal Corporation (BMC) of the Municipal Corporation of Greater Mumbai (MCGM), the civic body responsible for the governance of the city of Mumbai and also the provider of basic health care facilities. This paper focuses on the MCGM's public health care expenditure incurred since 2010 as well as the spending plan on public health infrastructure, its impact on availability of health care facilities to the weaker sections of the society.

Keywords: Keywords: Public Health Care, Municipal Health Expenditure, Mumbai, MCGM

INTRODUCTION

Health is invaluable to mankind. The growth and development of a nation depends really upon the health of its people. A healthy population means a better and more productive workforce, which in turn leads to better economic growth. This brings out the connection between health and success. Unhealthy people can hardly be expected to make any valid contribution to the economic and social development of a nation. The reflection of a society's development is found and measured in their health and nutritional status. Indicators such as infant mortality rate, maternal mortality rate, provision of and access to health care services, and nutritional status of women and children, thus assume greater significance. Health and nutrition is also instrumental in attaining higher productivity and economic welfare of the citizens.¹

SIGNIFICANCE OF THE STUDY

A sound and efficient health care system helps in improving a nation's wealth by ensuring a speedier economic growth and development. It is increasingly recognized and understood, that good health is an important contributor to productivity and economic growth, but it is, first and foremost, an end in itself. In a developing nation like India, where majority of the population have to rely on their physical labour, health assumes an even greater significance for their economic status.

India still has a very long way to go in providing basic health care to the citizens. Despite its growing economic prowess, India is ranked among one of the lowest spenders in terms of public expenditure on health care as a proportion of the Gross Domestic Product (GDP). The low levels of health care expenditure have led to a state of deficiencies in the health outcomes of a majority of the country's population. Health care indicators vary widely across Indian states, partly reflecting the differing levels of resources available to state governments. But one totally consistent trend seen is that health indicators are much worse in rural regions than in urban areas.²

Public health services are vital to the overall health status and well-being of the nation and improving them can bring about major economic and social benefits as well as minimize future preventable demand on health services over period of time. Hence, in the recent years, governments have realized the growing importance of public spending on health, as it is inextricably linked with the overall economic well-being of a country and its population, which is ultimately its workforce.³ In India, public health expenditure is incurred by the Central and

¹ Municipal Corporation of Greater Mumbai (MCGM). (2009). Mumbai Human Development Report. New Delhi: Oxford University Press

² The Economist Intelligence Unit Ltd. (2009). Healthcare in India: Rural Development. Retrieved March 26, 2019, from http://graphics.eiu.com/marketing/pdf/Philips_Healthcare%20Rural%20India.pdf

³ Jones, M., & Quinn, C. (2014). An Introduction To Health Services Research: A Practical Guide

State governments and also other Local Bodies. Thus, a total of health expenditure incurred by each of these government bodies provides an estimate of public spending on health in India.

SCOPE OF THE STUDY

Maharashtra is the second most populous state in India and also the richest state, contributing 25 per cent of the country's industrial output and 23.2 per cent of its GDP in 2010-11.¹ The state's capital, Mumbai, is the commercial capital of India and has evolved into a global financial hub. Mumbai is the most populous city in India, and the population in Mumbai according to the 2011 census was 12,442,373 and the population density is estimated to be about 20,482 persons per square kilometer.² The estimated Mid-Year Population 2016 for Mumbai was around 1,26,89,644 persons.³ The city of Mumbai houses one of the largest numbers of slum dwellers in the world⁴ who have numerous health issues, both due to pollution, fast-moving lifestyle and abysmal living conditions.

This paper focuses on the network of the public health care facilities, especially provided by the Brihanmumbai Municipal Corporation (BMC), in Greater Mumbai. The Brihanmumbai Municipal Corporation (BMC), also known as the Municipal Corporation of Greater Mumbai (MCGM) or the Bruhanmumbai Mahanagar Palika, is the civic body responsible for the governance of the city of Mumbai and is India's richest municipal organization. The Public Health Department of the MCGM provides the basic health care facilities to the citizens in an affordable and accessible manner and also manages other aspects related to preventive and social or community medicine.

OBJECTIVES OF THE STUDY

This paper analyzes the budgetary allocations to the public health care expenditure of the MCGM and endeavors to understand the ways to guide investment of scarce resources that will help to improve the well-being of the population. Low levels of investments can affect the quality of services provided by the public health care system. The objectives of the study are as follows:

1. To examine the pattern and trends of public health expenditure in Mumbai, since 2010.
2. To suggest policy measures for improving the public health care benefits.

The present research is based on data collected from secondary sources, and the necessary information on public health expenditure for the analysis was collected from various Economic Surveys of India and Maharashtra, and Basic Statistics relating to health from the MCGM for the years 2010-11 to 2019-2020.

ALLOCATION FOR HEALTH SECTOR UNDER THE VARIOUS BUDGETS OF THE MCGM

Public health financing is one of the key components towards achieving a universal health coverage model, as it helps to move closer to universal health-coverage through three inter-connected areas: it helps to raise funds for health, also to reduce monetary constraints of access through pre-payment and the subsequent collection of funds in preference to direct out-of-pocket payments; and also ensures allocation of funds in a way that promotes efficiency and equity. Public health programmes are concerned mainly with preventive, promotive and rehabilitative aspects giving importance to primary health care.

Public health expenditure, for the present study includes both capital and revenue expenditure incurred by the MCGM on health and family welfare, curative care (that is expenses incurred on hospitals and dispensaries, primary health care) as well as includes preventive and promotive programmes such as control of diseases,

(1st ed.). New Delhi: SAGE Publications.

¹ About Maharashtra. Retrieved

March 23, 2019, from <http://janpratinidhi.com/state/maharashtra-15>

² Mumbai City. Maharashtra. Retrieved March 17, 2019, from Census 2011,

<http://www.census2011.co.in/census/city/365-mumbai.html>

³ Mumbai City. Population. Retrieved March 28, 2019, from Census 2011,

<https://portal.mcgm.gov.in/irj/portal/anonymous/qlvitalstatsreport>

⁴ Ten of the Biggest Slums in the World. (2014, February 27). Retrieved March 15, 2019, from

<http://www.therichest.com/rich-list/poorest-list/10-of-the-largest-slums-in-the-world>

family planning, and immunization, medical education and teaching hospitals as well as maintenance of hospitals operated by MCGM and purchase of equipment.

TOTAL EXPENDITURE AND EXPENDITURE ON HEALTH BY THE MCGM

Total Expenditure by the MCGM has been rising over the period under study from ₹ 24587.42 crores in 2010-11 to ₹ 30692.59 crores in 2019-2020 (BE). Expenditure on health by the MCGM has also shown an increase in recent years reflecting the importance needed by this sector which has increased from ₹ 1891.39 crores in 2010-11 this figure has gradually increased to ₹ 3636.81 crores in 2019-2020 (BE). The table given next shows the growth of total expenditure by the MCGM from 2010-11 to 2019-20.

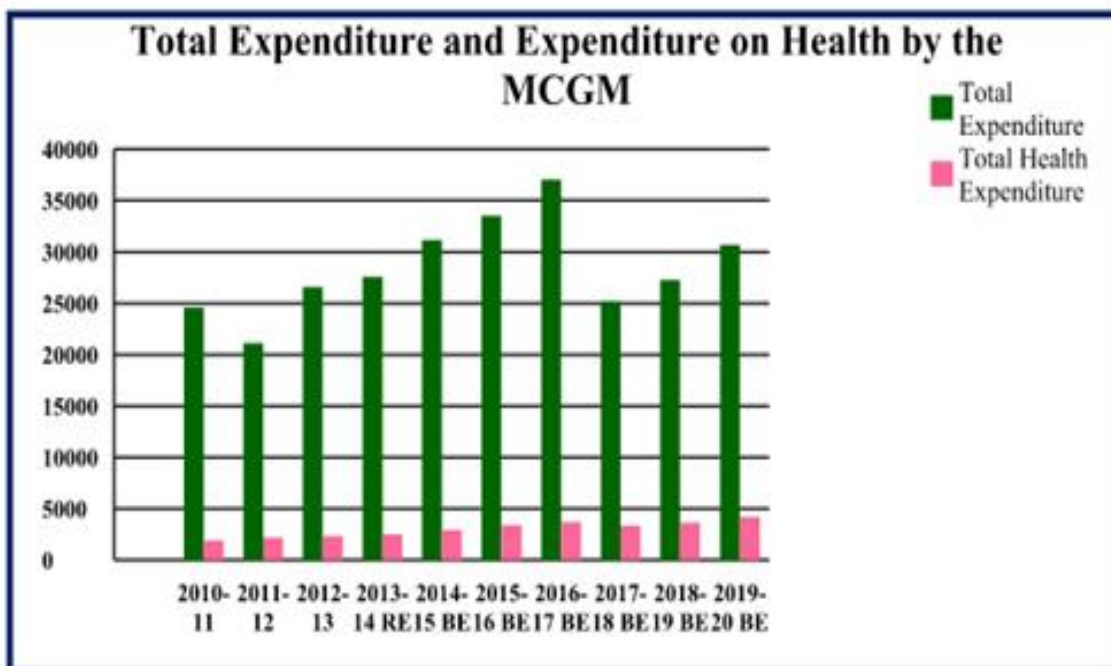
Table No.: 1 Total Expenditure and Expenditure on Health by the MCGM (₹ in crores)

Years	Total Expenditure	Total Health Expenditure
2010-11	24587.42	1891.39
2011-12	21096.56	2167.51
2012-13	26581.02	2345.67
2013-14 RE	27578.67	2508.63
2014-15 BE	31178.19	2906.73
2015-16 BE	33514.15	3359.78
2016-17 BE	37052.15	3693.74
2017-18 BE	25141.51	3311.74
2018-19 BE	27258.07	3636.81
2019-20 BE	30692.59	4151.15

Source: MCGM Budget and Annual Reports

The figure given next highlights the increase in expenditure incurred on health by MCGM and reflects a gradual increase in the years under study. As the figure clearly shows that the total expenditure has increased over the years but the expenditure of health has shown a gradual increase in spite of health being a high priority sector.

Figure No.: 1 Total Expenditure and Expenditure on Health by the MCGM



HEALTH EXPENDITURE AS A PERCENTAGE OF TOTAL EXPENDITURE

Health of the people has a great significance in terms of resources for socio-economic development. Public expenditure on health is an effective tool to improve the socio-economic welfare of the people. The table given below shows the health expenditure as percentage of the total expenditure incurred by the MCGM for the period of study.

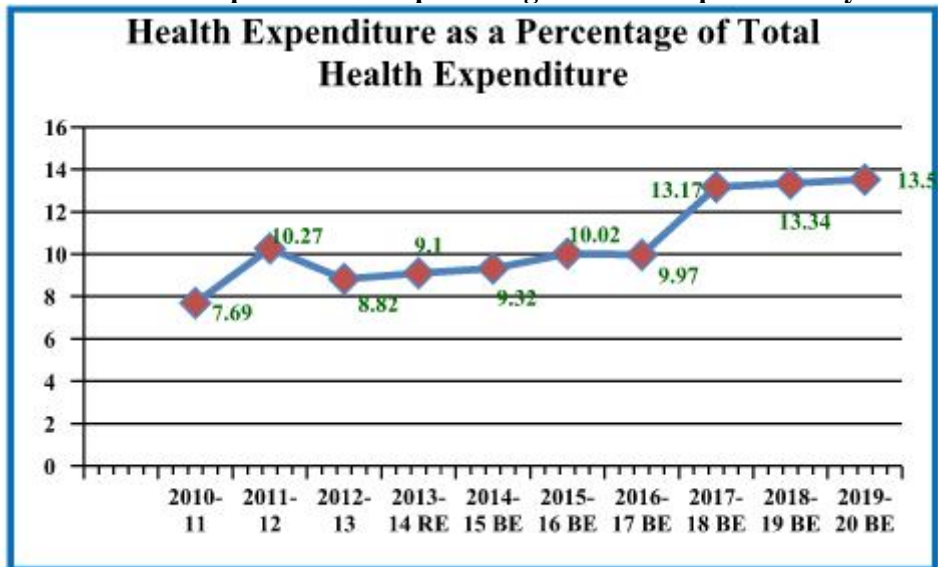
Table No.: 2 Health Expenditure as a percentage of Total Expenditure by the MCGM (Per cent)

Years	Health Expenditure as a percentage of Total Health Expenditure
2010-11	7.69
2011-12	10.27
2012-13	8.82
2013-14 RE	9.10
2014-15 BE	9.32
2015-16 BE	10.02
2016-17 BE	9.97
2017-18 BE	13.17
2018-19 BE	13.34
2019-20 BE	13.52

Source: MCGM Budget and Annual Reports

The table given above highlights the increase in expenditure incurred on health as a percentage of total expenditure by the MCGM. It highlights a gradual increase in the years under study, reflecting the priority given to this sector, yet only in the year 2015-16 it has managed to cross the 10 per cent. The figure given next highlights the increase in expenditure incurred on health as a percentage of total expenditure by the MCGM. It has reached 13.52 per cent as per Budget Estimates of 2019-20.

Figure No.: 2 Health Expenditure as a percentage of Total Expenditure by the MCGM



COMPOSITION OF PUBLIC EXPENDITURE ON HEALTH BY REVENUE AND CAPITAL ACCOUNTS

The best way to look at the structure of government expenditure is to examine the division of total expenditure between revenue expenditure and capital expenditure. Municipal expenditure can be classified into two categories: capital expenditure and revenue expenditure.¹

Revenue expenditure comprises of expenditures on Establishment, Administrative, Operations and Maintenance, and Interest Payments on Loans. While Capital Expenditure involves non-recurrent expenditure on physical fixed assets and infrastructure, which are expected to be productive assets for a long period of time, in addition to one-time capital investment in disease control and public health programmes and comprises Expenditure on Capital Formation, and Principal Repayment.

¹ Municipal finance – funds. Retrieved March 10, 2019, from <http://financingcities.ifmr.co.in/blog/2013/01/09/municipal-finance-funds/>

In the table given next shows that the public expenditure on health on the revenue account side, has increased from ₹ 1471.45 crores in 2010-11 to ₹ 3344.91 crores in 2019-20 (BE). Conversely, on the capital account side, it is noticed that in the year 2010-11, the public expenditure on health in Mumbai stood at ₹ 418.46 crores, but it gradually increased to ₹ 806.24 crores in 2019-20 BE.

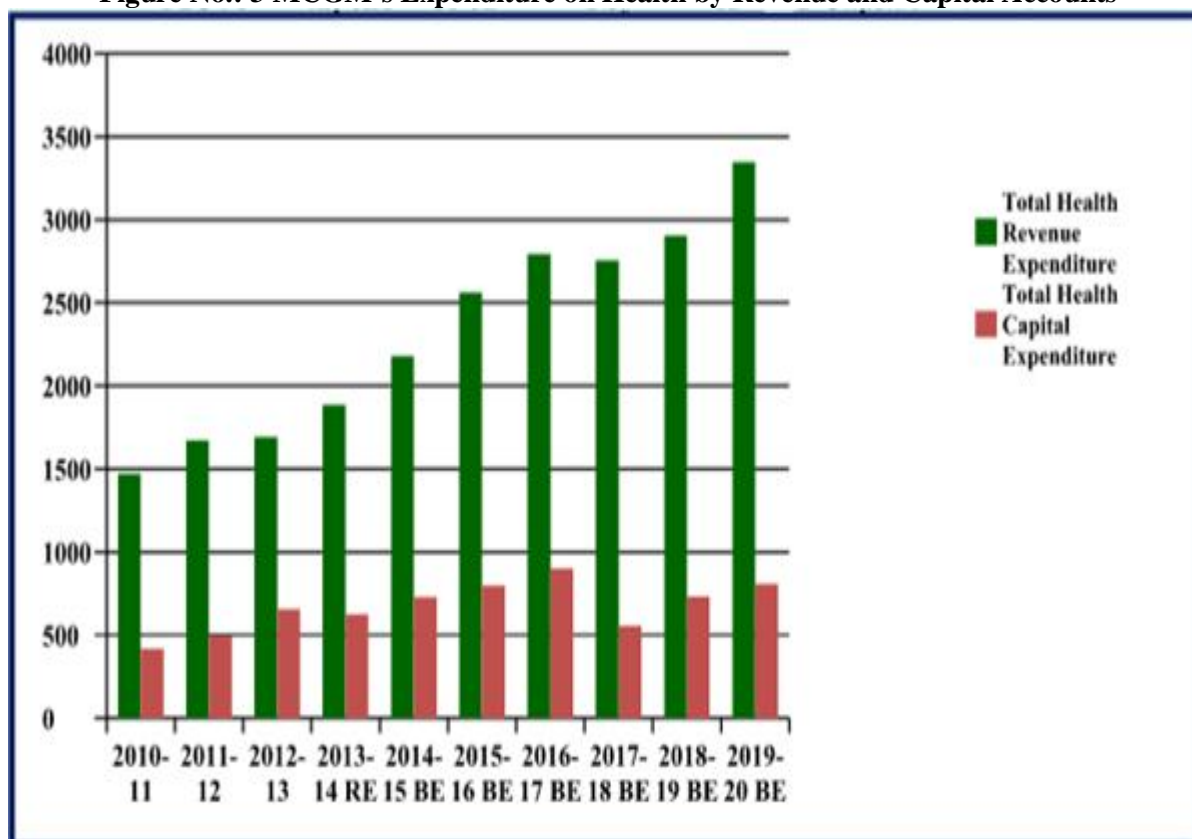
Table No.: 3 MCGM’s Expenditure on Health by Revenue and Capital Accounts (₹in crores)

Years	Total Health Revenue Expenditure	Total Health Capital Expenditure
2010-11	1471.45	418.46
2011-12	1672.47	495.04
2012-13	1690.22	655.45
2013-14 RE	1885.03	623.60
2014-15 BE	2179.35	727.38
2015-16 BE	2561.24	798.54
2016-17 BE	2792.9	900.84
2017-18 BE	2755.96	555.78
2018-19 BE	2905.29	731.52
2019-20 BE	3344.91	806.24

Source: MCGM Budget and Annual Reports

The figure given next shows that overall, the total public expenditure on health in Mumbai, irrespective of revenue and capital accounts, has increased gradually over the period 2010-11 to 2019-20.

Figure No.: 3 MCGM’s Expenditure on Health by Revenue and Capital Accounts



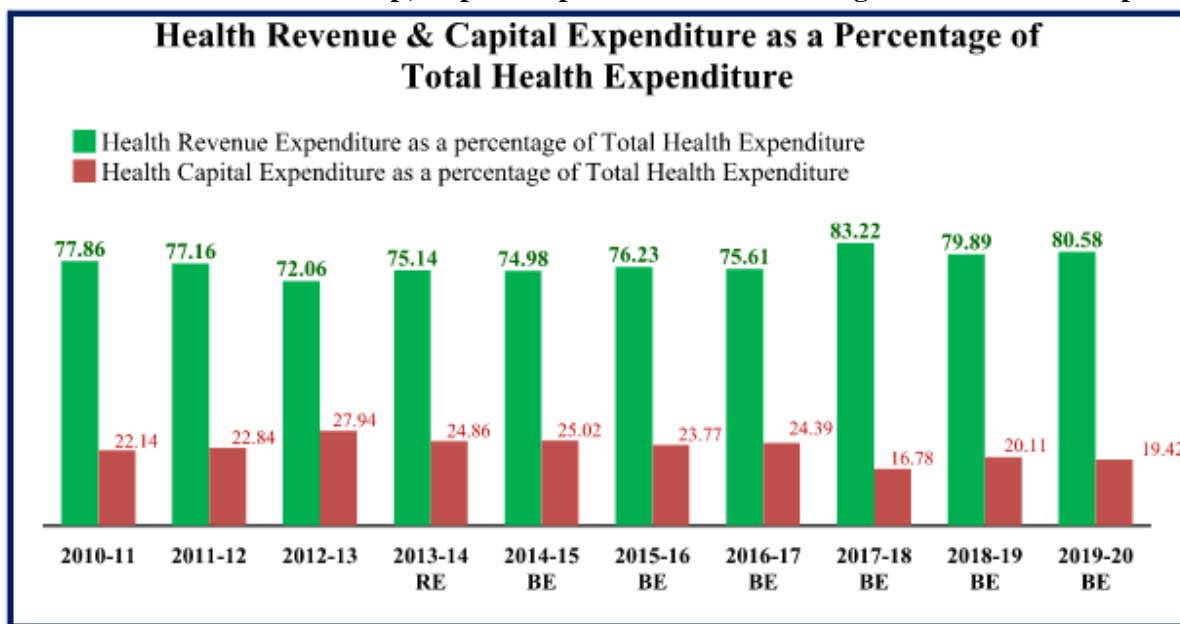
The next table shows public expenditure on health on the revenue and capital accounts as a percentage of total health expenditure. As a percentage of total health expenditure, on the revenue account side, it is noticed health expenditure had increased from 77.86 per cent in 2010-11 to 80.58 per cent in 2019-20 (Budget estimates), whereas on the capital account side, it is noticed health expenditure had decreased from 22.14 per cent to 19.42 per cent in the same period.

Table No.: 4 Health Revenue & Capital Expenditure as a Percentage of Total Health Expenditure (Per cent)

Years	Health Revenue Expenditure as a percentage of Total Health Expenditure	Health Capital Expenditure as a percentage of Total Health Expenditure
2010-11	77.86	22.14
2011-12	77.16	22.84
2012-13	72.06	27.94
2013-14 RE	75.14	24.86
2014-15 BE	74.98	25.02
2015-16 BE	76.23	23.77
2016-17 BE	75.61	24.39
2017-18 BE	83.22	16.78
2018-19 BE	79.89	20.11
2019-20 BE	80.58	19.42

Source: MCGM Budget and Annual Reports

Figure No.: 4 Health Revenue & Capital Expenditure as a Percentage of Total Health Expenditure



The table given above shows the proportion of public expenditure on health allotted in terms of revenue and capital accounts by the MCGM. It is also significant that a greater proportion of the expenditure is allotted to revenue expenditure (essentially, the payment of salaries) rather than for capital expenditure which is essential for creating much-needed basic physical infrastructure

- A detailed study shows that a major portion of the revenue health expenditure is on establishment and administrative expenditure, which includes salaries and other general operating expenses. While operation and maintenance expenditure as well as expenditures on various crucial public health programmes are comparatively less.
- It is necessary for the MCGM to allocate more funds for operation and maintenance as well programmes expenditures as it helps to maintain curative and preventive health of the citizens
- A major component of capital health expenditure is spent on main tertiary and teaching hospitals, and less on the peripheral hospitals. This is disquieting trend as most of the peripheral hospitals are located in the various suburbs of the city and suffer problems arising from lack of specialized equipment, lack of manpower etc. As a result, the residents living nearby these peripheral hospitals are compelled to opt for treatment at the tertiary hospitals, which are already over-crowded or go for expensive private treatment.

- Population statistics show that 75.21 per cent of Greater Mumbai's population stay in the Suburbs (which has also high number of slum population) has only access to 37.64 per cent of the city's public health care facilities, whereas 24.29 per cent of Greater Mumbai's population staying in the Island City has access to 62.36 per cent public health care facilities. The MCGM has to allocate more funds for peripheral hospitals to be used by the citizens of Mumbai already facing an inequitable spatial distribution of the health care facilities.

CONCLUSION

Public health service should be as fully organized and as universally incorporated into our governmental system as is public education. The returns are a thousand fold in economic benefits, and infinitely more in reduction of suffering and promotion of human happiness.¹

~ Herbert Hoover (Former President of the United States)

The findings show that the public health care services utilization depends on the availability of health care services at reasonable costs and also on the quality of health care services. Availability of public health care services depends on the funds allocated to the health budget by the public authorities. It is suggested that the public authorities should increase budgetary allocation to health care, which will in turn help to retain and attract more medical personnel and at the same time provide funds for the redevelopment and renovation of the existing infrastructure, like buildings, modernized equipment, clean premises etc.

Financing health care is one of the critical determinants that influence the health outcomes in a country. The health system goals of equity and accessibility necessitate adoption of an appropriate financing strategy that will ensure protection of the majority of individuals from catastrophic out-of-pocket health expenditure. An appropriate strategy for prioritization and allocation of health care funds though difficult due to the complexity of the health system is necessary and policy makers would need to assess health system performance and prioritize allocation of resources, across competing ends to obtain the best possible health outcomes

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¹ Hoover, H. (2019, March 07). 330 Health Quotes for A Better Mind, Body (And Life). Retrieved from https://www.brainyquote.com/quotes/herbert_hoover_756126?src=t_public_health

TRENDS IN SOCIAL SECTOR EXPENDITURE WITH SPECIAL REFERENCE TO EDUCATION IN INDIA

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ABSTRACT

The human resources of a country are its most precious asset. It should be molded and turned as per the changing needs of the economy and society to enhance overall standard of living and sustained economic growth. This requires constant encouragement from the part of government through allocation of funds to social sector and its development. The need for human resource development is stressed in a country like India where more than sixty percent of the population live in rural areas and depend primarily on agriculture for employment. Government should provide adequate resources both physical and financial for the development of social service sector as this has an important role in the economic growth and human development of a nation. This research paper tries to look into the trends in public expenditure in social sector, emphasizing on education. It also tries to find out the impact of public expenditure on human development and economic growth.

Keywords: Social Sector, Human Development, Public Expenditure, Education, Gross Domestic Product

INTRODUCTION

Education is central to overall human resource development. While basic education develops basic skills related to literacy, higher education especially at the tertiary level involves specialization in fields of study and occupation relevant to developing technological capabilities. Better access of the poor to education and health care, and a better quality of these services, expand opportunities for them to improve their own well-being. Therefore, this calls for allocating adequate government resources for the development of human capital development.

PURPOSE AND SCOPE OF THE STUDY

Education is one of the most important lever for socio- economic and political transformation as well as the most potent tool for socioeconomic mobility to ensure building up an equitable society. Recognizing the importance of education in national development, the Government of India has taken significant measures through various policies and plan allocation to develop the social sector. But in spite of the increasing budget allocation for education over the years, India's Public Expenditure on education as a percentage of GDP is comparatively low compared to several Asian countries as well as developed economies. This study helps to look into the trend in government expenditure across selected social sector with special reference to education. This analysis can help to identify whether government expenditure on education and social sectors are relevant for the development of a country.

STATEMENT OF THE PROBLEM

India is on the threshold of demographic dividend, reaping the advantages of a larger number of young people in the productive age group between 15 and 59 likely to increase from 58 percent in 2001 to more than 64% by 2021 (GoI 2013). This demographic dividend can be beneficial only if this young population is healthy, educated and skilled. For this, huge investment within the education and health sectors by the central and state governments is necessary. Existing capacity and resources are inadequate, particularly for education and health (Murthy, Hirway, Panchmukhi & Satia 1990). Substantial enhancement in budgetary support for the development of the social sector needs to be addressed by the government on a priority basis. Even though physical access to education and health services has improved, inequalities still persist due to the inadequate and inappropriate provision of these services with respect to their needs and service leak to non-poor. The present study has tried to look into the public expenditure on social sector development with special reference to education in India during the period 2005-06 to 2017-18.

OBJECTIVES OF THE STUDY

- 1) To investigate the trends in public expenditure on social sector in India.
- 2) To identify the impact of public expenditure in education on HDI and economic growth.
- 3) To suggest measures to improve government spending on education and other social service sectors.

METHODOLOGY

The study mainly uses secondary data collected from various print and electronic sources. Economic Survey, RBI reports, World Bank Reports, Economic Survey etc. are used to collect the relevant data required for the present study. Simple statistical methods like percentage; graphs etc. are used to analyze the data.

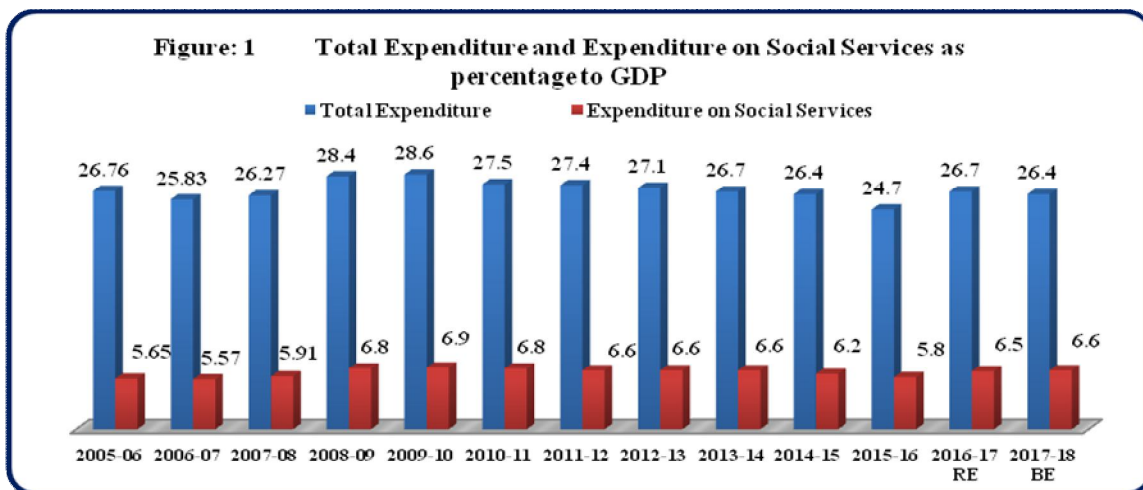
SIGNIFICANCE OF SOCIAL SECTOR AND EDUCATION

Social sector development is very essential for the overall growth and development of a country as it directly affects the level of human development of a region. As the social sector develops, quality of life improves, leading to better quality human capital that leads to higher productivity. Thus, the achievement in economic front is closely dependent on the development of the social sector (Dreze and Sen, 1995).

Investment in human capital is a prerequisite for a healthy and productive population for nation building. Being a developing economy, the country needs to give more importance to developing critical social infrastructure like education and health as they raises human capital, productivity, incomes, employability, and economic growth. Beyond monetary gains, a better human capital makes people healthier and gives them more control over their lives, generates trust, boosts social capital, and creates institutions that promote inclusion and shared prosperity (WDR, 2018). As India is poised to grow as one of the leading knowledge economies, education, skill development and health should be the priorities for the Government in the new globalized era. Without strong, skilled human capital base, progress of a nation is impossible and investment in education is very essential to achieve the desired economic growth. Therefore the Government should take initiative in providing these facilities to the people, especially the poor and weaker sections, who are depended on state provided facilities. The present paper attempts to analyze these, drawing upon the importance of public expenditure in social sector, especially in education.

TRENDS IN SOCIAL SERVICES EXPENDITURE AS PERCENTAGE TO GDP

Social Sector Expenditure is defined as the total of expenditure on ‘social services’ and ‘rural development’ which includes health, education, water and sanitation, housing, employment programmes, etc. allotted by the Central and State budgets for the development of the human resources of the nation. Better human resource can lead to higher growth and development of a nation. Therefore it is essential to have an idea of Government’s share in Social Service expenditure as a percentage of GDP. See Figure: 1, which highlights the total expenditures and expenditure on Social Services, like education, health and others as a percentage of the GDP.

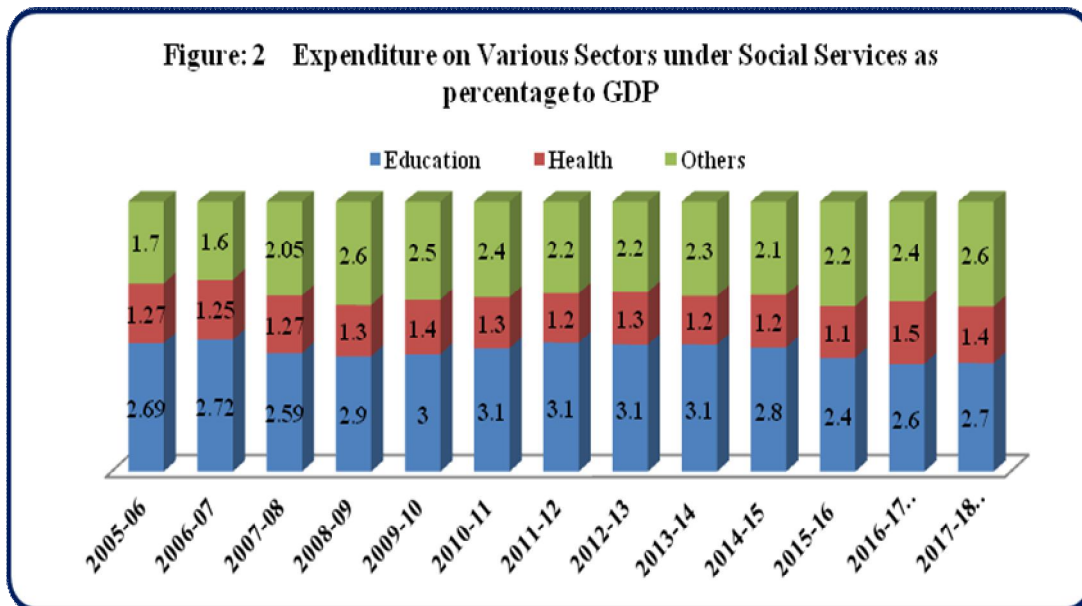


Source: Budget Documents of the Union and State Governments, RBI.

It should be noted that the public expenditure on social services which has been increasing till 2009-10 from 5.65 to 6.10, started declining thereafter and reached 5.8 in 2015-16. This can be because of the globalization and privation aspect which tended the government to open up its social service sector to private providers coupled with international economic crises affecting selected countries impacted the government revenue generation which in turn reduced their spending in these areas.

TRENDS IN EXPENDITURE ON VARIOUS SECTORS UNDER SOCIAL SERVICES AS PERCENTAGE TO GDP

Public expenditure on different social sectors will give us a clear idea regarding the spending pattern of government in various social sectors. See Figure: 2. Percentage share of expenditure on various social sectors like education, health and others as a percentage of GDP enables us to have a better ides regarding importance given by the Government to these sectors.



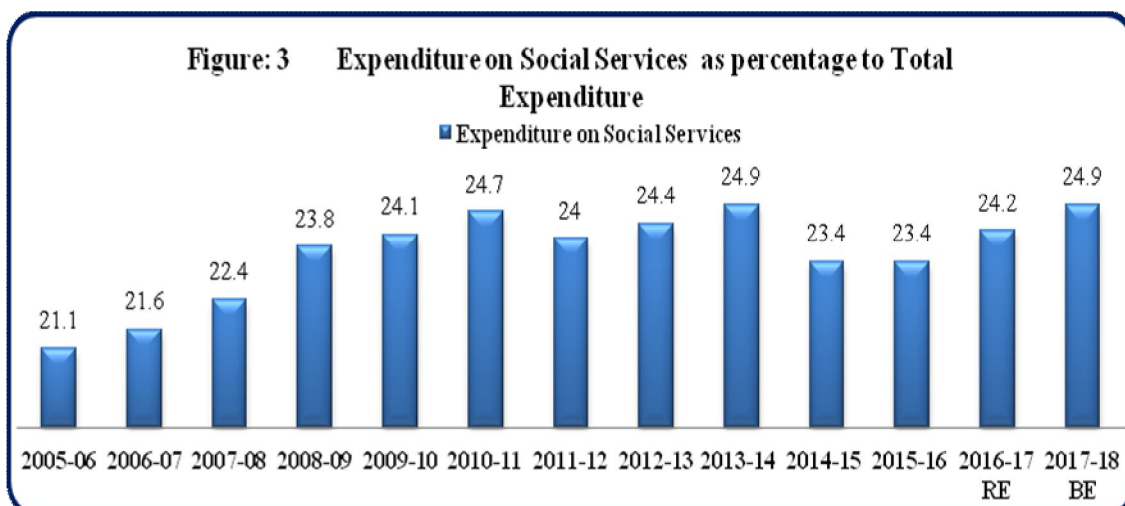
Source: Budget Documents of the Union and State Governments, RBI.

The percentage of educational expenditure to GDP shows that the percentage has more or less remained steady even though it increased from 2005-06 to 2010-11 from 2.7 to 3.1 percent remaining stable till 2013-14 and declining thereafter. The percentage share of expenditure on health has been more or less stable around 1.3 percent. The share of India’s public expenditure on education and health is much less compared to many of the developed countries and even some of the developing countries, which is a matter of concern.

TRENDS IN SOCIAL SERVICES EXPENDITURE AS PERCENTAGE TO TOTAL EXPENDITURE

Percentage share of social service sector as a percentage of total expenditure shows the importance given by the government to these sectors. The data shows the share of social service sector spending has been more or less increasing till 2013-14 and thereafter showing a declining trend. The government’s shift of importance from social service sector can be one of the reasons behind this.

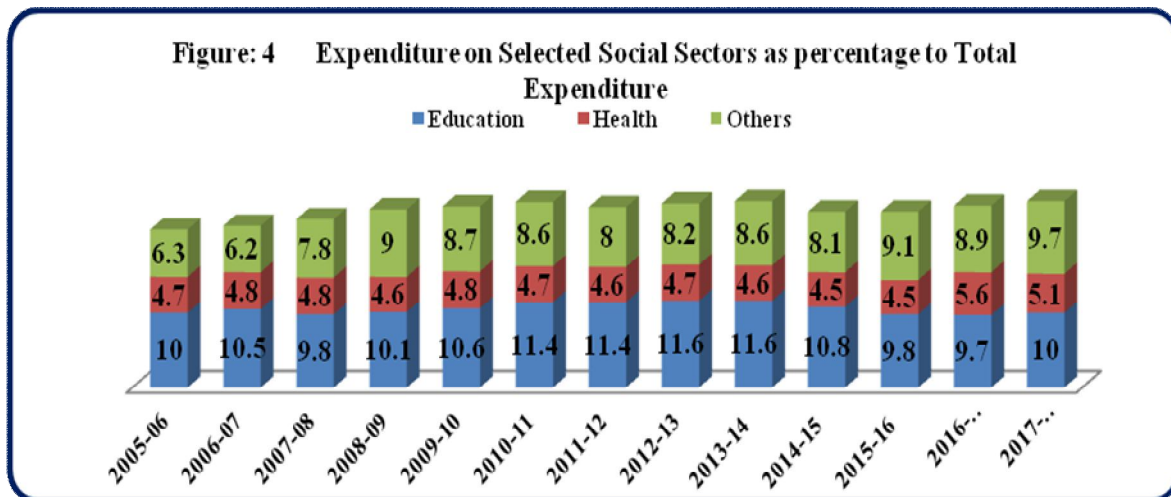
Figure: 3 highlights the expenditures incurred on social services as a percentage to total expenditure. Expenditures on Social Services as a percentage to total expenditure are in the range of 21.1 per cent to 24.9 per cent for the period under study and have been the highest at 24.9 per cent.



Source: Budget Documents of the Union and State Governments, RBI.

TRENDS IN EXPENDITURE ON VARIOUS SOCIAL SECTORS LIKE EDUCATION, HEALTH AND OTHERS

Expenditure on various sectors under Social Services like education, health and others as percentage to total expenditure is shown in Figure: 4. It shows a mixed trend. In India, the expenditure on education as a percentage of the total expenditure increased from 10 per cent in 2005-06 to the highest 11.6 percent in 2012-14 and then declined to the lowest 9.7 per cent in 2016-17 (BE). However, the expenditure on health as a percentage of total expenditure has not shown any significant changes, over the last ten years.



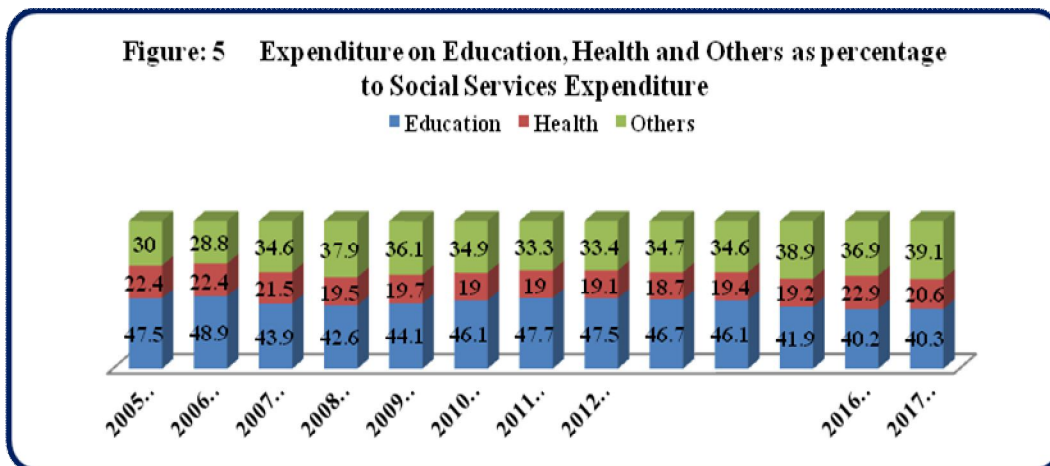
Source: Budget Documents of the Union and State Governments, RBI.

The figure clearly indicates that the expenditure on health is very low in comparison to the various social service sectors and can be considered as one of the reasons affecting the human development of India.

TRENDS IN EXPENDITURE ON EDUCATION, HEALTH AND OTHERS AS PERCENTAGE TO SOCIAL SERVICES

It is important to analyze the expenditure on education, health and others as a percentage of social services which is shown in the Figure: 5. The expenditure on education as a percentage of the Social Services has shown a mixed trend and has declined from 48.9 per cent in 2006-07 to 42.6 per cent in 2008-09 which is one of the lowest and then fluctuating and finally reaching the lowest 40.3 per cent in 2017-18 (BE). Initial decline to 42.6 per cent has been due to the global economic crisis which had an influence on various sectors of the economy as well as the government spending.

Health expenditure constitutes a smaller part of the total social expenditure when compared to education. However, the expenditure on health as a percentage of the Social Services has shown significant lower levels 22.4 percent in 2005-06 and thereafter it has consistently declined to around 19 per cent till 2015-16 and later showing a slight increase.



Source: Budget Documents of the Union and State Governments, RBI.

Therefore, the analysis reveals that as a percentage of GDP, the educational spending is currently at just 2.7 per cent, and as a percentage of Total Expenditure it is at 10 per cent, while as a percentage of Social Services Expenditure it is at 40.3 per cent. These figures reveal that public expenditure on education is certainly not sufficient for a country like India, where a considerable portion of poor sections depends largely on public provision of health and education, and where public investment is not only critical but also expected to be high.

IMPACT OF PUBLIC EXPENDITURE IN EDUCATION ON HUMAN DEVELOPMENT AND ECONOMIC GROWTH

Impact of the government spending on Social Sector can be analyzed using HDI and GDP/GNI. For this purpose we have selected countries on the basis of HDI Ranking and economic growth. Table: 1 clearly shows the significance of public expenditure on economic growth and human development.

Table: 1 Share of Educational Expenditure to GDP, HDI and Economic Growth in 2017

Country	Expenditure on Education as % of GDP	HDI Score 2017	GDP Per Capita (PPP) in current international (\$)	GNI Per Capita Purchasing Power Parity (PPP) in Current international \$
Norway	7.55	0.953 (1) – V.H	61,414.30	63,980
Sweden	7.55	0.933 (7)-V.H	50,208.20	50,980
USA	4.99	0.924 (13)-V.H	59,531.70	60,200
UK	5.54	0.922 (14)-V.H	43,268.80	42,560
Japan	3.47	0.909 (19) V.H	43,279.00	44,850
Sri Lanka	2.81	0.770 (76) H	2,835.30	12,490
China	4	0.752 (86) H	16,806.70	16,760
India	3.84	0.640 (130) M	7,059.30	6,980
Nepal	5.1	0.574 (149) M	2,696.70	2,730
Afghanistan	3.93	0.498 (168) L	1,972.2	1980

Source: World Bank & UNESCO

Note: HDI Rank is shown in brackets and V.H-Very High, H-High, M-Medium, L-Low Human Development.

Countries with high public expenditure on education as a percentage to GDP show better performance in terms of human development. Countries like Norway and Sweden who got the highest HDI with first and seventh ranks respectively, spend around 7.6 per cent of their GDP on education. In other words expenditure on education is directly related to HDI. Similarly, economic growth represented by GNI Per capita income also shows that countries with higher per capita GNI fare better in terms of HDI. Countries like Norway, Sweden, USA, UK having the high HDI confirms this notion. Afghanistan is the worst performer in HDI belonging to the Low Human Development Category followed by Nepal and India belonging to Medium category. One of the reasons behind this is the inadequate public expenditure in significant social sectors like education, health, sanitation, water supply etc. Even developing country like Sri Lanka has got a comparatively better HDI Rank (76) compared to India (130) in 2017. One of the reasons is that the Per Capita GNI in PPP of Sri Lanka is almost twice that of India's. Similarly, life expectancy at birth in Sri Lanka is higher than India's, around 74.64 against India's 67.47 in 2015 (UN). Literacy rate in Sri Lanka is also higher than India, i.e. 92.6% in Sri Lanka whereas it was 69.3% in India as per UNESCO data. Sri Lanka¹ has been providing free healthcare services to its citizens under the Free Healthcare Policy since 1951. Under the Free Education Policy which came into effect in 1945, majority of the Sri Lankans have access to education and this has resulted in a higher literacy rate. This stresses the importance of Government policies and finances in deciding the growth as well as human resource development of a country.

SUGGESTIONS

Central government should give more thrust on expenditure towards social sector spending which would enhance the quality of human resource available in the country and thus transform India into a developed nation in the long run. The government ought to give more importance to education and sharpen the skill of the labour force to increase the productivity of the nation. The health status and housing facility of the socially and economically backward population maybe prioritized to develop a strong human resource for the nation. Above all, steps should be taken by the Government to ensure that these facilities are being appropriated by the poorer sections, which does not have the adequate resources to make use of the education and health facilities provided by the private sector. The country should have an appropriate fiscal policy that enables the state governments to extend spending in the development sectors. The institutional and procedural bottlenecks in designing, fund flow and fund utilization processes ought to be removed through combined efforts by the Centre and also by the states. Such small steps in this direction would lead India to achieve higher growth coupled with high human development in the long run.

CONCLUSION

Human resources are the best capital available with any country to enable growth and development. The ultimate goal of economic growth is to enhance the standard of living of the people of the country. Thus priority

¹ See this link for details <http://www.ips.lk/talkingeconomics/2017/07/04/human-development-sri-lankas-achievements-and-challenges/>

should be given in allotment of fund to develop and support the human resource of the country. In India with majority of the population living in backwardness and the economic growth not having any major impact among the rural masses, enough expenditure should be directed towards the social sector and its development. The social sector spending must be enhanced. Expenditure on education, health and alternative social sectors ought to be stressed as they will lay a robust foundation to develop a strong economy through human resource development in the long run.

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ROLE OF THE LIBRARIES AS DATA RESOURCES IN GLOBALIZATION

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ABSTRACT

Information technology is presently taking center stage and remodeled the whole world into a world village with a world economy, which is increasingly captivated with the artistic management and distribution of information. The big blessings it's in easing the delivery of information round the world. The paper mentioned concerning Role of the libraries as data resources in economic process. It conjointly highlights the issues visage by the Library Service (LIS) sector in Asian country and achievements over the year's victimization trendy data technologies.

Keywords: ICT, Information Technology, Library Services, Information Resources

INTRODUCTION

Information technology has remodeled the entire world into a world village with a global economy that is more and more written by the artistic management and distribution of data. Over the past decades the globe has been experiencing significant changes within which the requirement to amass, utilize and share data has become more and more essential. Now, within the twenty first century, the age of data and information is in its higher gear. This is often an age once invisible data and information take the role of prime movers leading all sectors. The globe Bank has used figure of speech "knowledge is development". Lack of data is essentially responsible for beneath development. In an exceedingly data and information-oriented society.

NEED FOR THE STUDY

Information technology has introduced several changes in the approach data is known, procured, processed and disseminated to library clientele These shifts include moreover, Data technology has created a way of urgency among library users and librarians themselves:

1. Transition of knowledge sources and systems from paper to electronic media.
2. Complexity in data desires of extremely rigorous business.
3. Increase within the price and quality of knowledge.

It is associate accepted undeniable fact that the knowledge technology has influenced all the components of a library system: Data sources, services, human resources and users. It's a lot of therefore just in case of management libraries where the stress is a lot of on the currency of knowledge. The industry – oriented, case study ways and active ways of conveyance management education require management Libraries to be ever awake to the dynamic Data desires of their business.

OBJECTIVES OF THE STUDY

The primary objective of the current study is to look at the "Role of the libraries as information resources in globalization" library services impartation skilled education the particular objectives are to:

1. Survey the prevailing data technology infrastructure.
2. Study the impact of IT on library resources .
3. Study the impact of IT on Data services.

Information Technology enhances straightforward data retrieval of documents. Retrieval of information from electronic resources and web is less complicated, easier and quicker in comparison to manual systems. The impact of knowledge technology in assortment development is incredibly outstanding in library. The assistance of net, acquisition work has become a great deal simplified.

Order putting, Duplication checking, Value checking etc are done terribly effectively victimization IT technique. On-line bookshops and publisher's websites save the time of the librarians. For the procurance of journals, order is placed within the prescribed format to the publishers through web.

Invoices are downloaded from the Websites that creates service quicker and avoids communication daily. Email helps in causation reminders to the Publishers, Vendors and even to the borrowers of the books. IT conjointly helps within the method of the serial management within the library. It helps in Establishing links to the foremost oftentimes used library catalogues facilitate the librarians for Role of the Libraries as Data Resources in globalization fifteen authority work. With the Assistance of OPAC it's currently terribly

convenient for the technical staff to assign decision numbers to the new added books. It has revolutionized the practice of cataloguing within the library. OPAC also providing following information.

1. The holding contains of periodicals.
2. The variety of database including full text file.
3. Integration of acquisition & Circulations.
4. Instruction to use the OPAC.
5. Information about the library committee events.

IT reduces labor and saves tons of your time of the employees and users too. Local area network is employed to link sort of completely different communication devices. Web and E-mail system in library modify the scholars and student to remote access, worldwide communication. Skilled communication among library & data science societies has become straightforward with the assistance of E-mail. Increasing competition in commission businesses (eg: Data Technology, Healthcare, Education, Logistics, Distribution, cordial reception monetary and alternative services) is compelling company to adopt business improvement philosophies and methodologies for addressing client demands for higher quality service and organizational demands for rising the profit margins through price reduction. Many corporations round the world have already enforced data Technology Infrastructure Library (ITIL) as the simplest way to manage and management their information Technology (IT) Departments a lot of effectively. These corporations square measure now willing to enhance their ITIL processes so as to become even a lot of economical. Lean Six letter could be a methodology that has been steered as a method to resolve these problems, reducing prices and rising quality. Its application within the IT Services space is turning into more and more fashionable among researchers and academicians and may be used to conduct these enhancements. Despite the appliance of lean six letter approaches to completely different contexts within the service sector ,the application of Lean Six Sigma approaches in commission delivery specific to data Technology Service Management (ITSM) remains for the most part untested.

ROLE OF LIBRARIES

The Library has a particular role in all the fields.

These are following roles in library :-

1. Ancient library as a memory establishment.
2. Library as a learning and analysis centre.
3. Library as a cultural and communication centre.
4. Electronic library.
5. Digital library.

Libraries had been performed several necessary roles within the past agricultural and industrial societies. However those roles were restricted in scope. Within the twenty first century, libraries have to be compelled to perform important roles in dispersive and sharing the culture of data.

In this age information of data of information} libraries ought to be repositories of all of the knowledge and information accumulated by human kind. They'll have to be compelled to store every kind and forms of material and data and bare on the far side the geographical boundaries.

PROBLEMS AND OPPORTUNITIES FACING LIBRARIES IN INDIA

Library and knowledge services are basic to the goals of making disseminating, optimally utilizing and protective information. They're instrumental in transforming associate unequal society into associate egalitarian, progressive knowledge-based society. It's documented that in India most of the libraries perform within the government sector.

These are in educational and analysis establishments and below the general public library system, that is once more below the state and central governments. At present, education being a state subject and returning below the range of various apex agencies, there is no common direction or coordination among them. it's imperative that every on libraries (public, academic, analysis associated special) modification and develop at an accelerated pace. Developments in data communication technology (ICT) have enabled libraries to produce access to all or any, and additionally bridge the gap between

the native, the national and therefore the world. However the Library and knowledge Services (LIS) sector in India has not unbroken pace with the paradigmatic changes happening in society. There are a few libraries that are mistreatment state of art technologies to disperse information to their several user communities. There's lack of cooperation among the libraries of different organizations and that cause the dearth of union catalogues at national level. The national library is failing even to try to to this large task. One amongst the key issues faced by LIS sector in India is lack of list management at national level that causes duplication in analysis.

TECHNOLOGY IN LIBRARY SERVICES

It is established undeniable fact that it's brought the revolution within the field of library and information science, as we've got already mentioned that every one library work activities like acquisition, processing, organization and dissemination of data services square measure supported laptop, communication and reprographic technologies, which has expedited the subsequent services being provided to the users a lot of effectively wizards. Reference services, bibliographical Services, Referral Services, OPAC, Current Awareness Services, Document Delivery Services, Selective Dissemination of Information (SDI), Barcode Base/ Services, User orientation program, in- house personal coaching, Resources sharing and different services. Such facilities are being extended to the academicians, researchers and library users to search out their needed data without any barriers square measure doable solely owing to I.T. application in library and Information centers.

USERS EXPECTATIONS

Library and data Centers are enjoying an important role by providing the data to Jayashree Parab and required by the users or their analysis and organic process activities. The libraries supply various kinds of services to the user community and unfold the information. The main task is of diffusive the data from the gathering still as created it available from the opposite institutional resources. The standard services provided by the libraries like unwell, CAS, SDI, listing listing, room, book borrowing were principally supported the library assortment, however because of application of data Technology the trends within the library and data centers also are shifting towards modernization. The ways and practices used also are dynamic and therefore the price and services are rising as key parts within the new library setting. Globally, libraries face the challenges because of the introduction of the IT within the profession and the increase within the variety of publications; whereas the user demands are getting terribly pinpointed and specific .The electronic publication has additional modified the mode of services expected from the standard libraries. the standard mode of library services was supported the medium, whereas the current mode lays emphasis on digital info resources, net and net resources for providing the services Users Expects from the tutorial Libraries the subsequent aspects; Comprehensiveness, Accessibility, Immediate gratification, Follow the ability of information.

CONCLUSION

The future of the machine-driven libraries within the developed/ developing countries looks to be terribly promising and it may be hoped that additional and additional libraries can adopt automation techniques/systems within the terribly close to future, sooner instead of later. The new generation of computers and its use in libraries isn't solely modernization however it has become a necessity. In coming back times, computers hold smart future. It's expected they would be found helpful in handling info explosion and several routine jobs in libraries economically .the outstanding growth of net has created vital Revolution altogether the areas of science and technology. Instead of victimization it as a tool for searching and retrieving info, net has become the king of all media, by which we will access virtual info and might build a virtual library to supply timely, quality service to the users.

Librarians of this digital era are within the position to change their role as capricious info scientists/gatekeepers and to satisfy the Challenges of the net, World Wide net and on-line access within the information society. So that they should enrich their information with special skills of the newest IT developments, to browse, access and retrieve specific info across the worldwide networks and to prepare and manage the knowledge by building digital libraries and by that they'll offer quality-information service to the information society.

Library employees should be capable of operating effectively in partnership with college

RECOMMENDATIONS

Based on the conclusions on top of, it's suggested that

1. The funding Provision is necessary in the library and it is necessary for her parallel distribution in the library.
2. Traning the library staff and usres to handle the library.

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3. Students additionally have to be compelled to be trained on the way to use these facilities towards achieving tutorial excellence. This could be through continuous orientation and the inclusion of such courses like: Use of laptop for info retrieval, Use of Internet/world wide internet and IT applications.

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ECONOMIC EMPOWERMENT OF WOMEN THROUGH MICRO FINANCE: A STUDY ON KUDUMBASHREE SELF HELP GROUPS IN PADNE GRAMA PANCHAYATH, KERALA**Dr. C K Hebbar¹ and Prakashan K²**Associate Professor¹, (Rtd.), University College, Mangalore
Research Scholar², Mangalore University, Mangalore**ABSTRACT**

Empowerment is a process of attaining power in taking decisions relating to the various aspects of one's life. It enables weaker and marginalized groups to access and control various resources to which they have little access. Women community needs empowerment to ensure their participation in developmental activities. Among various empowerment variables economic empowerment is more powerful and widely accepted. Micro finance is an important tool for economic empowerment among the women. Micro finance is a small amount of finance available to poor and marginalized groups who have little access to formal banking system. Beneficiaries use micro finance mainly for their domestic purposes like purchase of durable goods, construction of homes, repayment of existing bank loans, education of their childrens' etc. Kudumbashree mission, a state poverty reduction programme in Kerala is undertaking the responsibility of extending micro finance among Self Help Groups (SHG). SHGs create micro finance from their thrift fund and other permissible fund. Now these SHGs are primarily focusing in the economic empowerment of their members.

Keywords: Empowerment- Economic empowerment-Micro finance- SHG-Kudumbashree

1. INTRODUCTION

Empowerment is a wider term usually used in connection with poor and weaker section of the society. Through empowerment the less privileged groups are getting power to access, control and take decisions regarding various economic, physical and human resources. Empowerment will create a feeling in their mind that they are not being exploited by others and can attain self reliance. Planned actions which empower weaker sections of the country ensure their participation in developmental and growth process of a nation. Among various empowerment variables economic empowerment is more powerful and effective. Economic empowerment is the capacity of men and women to participate, contribute and benefit from the growth process and society recognize their contribution, respect dignity and make it possible to negotiate a fairer distribution of the benefits of the growth. Microfinance is a strategic tool implemented by government and its agencies to empower women economically in a phased manner. Microfinance refers to small amount of finance available to poor and marginalized groups to meet their domestic needs. It is available to those who have little access to formal banking system. Micro finance includes micro credit, insurance and other financial services mainly cater to the needs of poor people.

In Kerala, the responsibility of spreading microfinance system is undertaken by a state government sponsored agency, known as Kudumbashree Mission. Kudumbashree, a state poverty reduction programme officially implemented by the Government of Kerala in 1998. Neighborhood Group (NHGs) is the basic unit of the Mission which functions as Self Help Groups. At least ten female from different families are needed to form a NHG. Maximum of twenty persons are allowed to join in the NHGs. They meet regularly (generally, weekly) and contribute towards their thrift. This thrift is a major source of microfinance of SHGs. They create micro loans and distribute the loans to needy persons. There is no legal and procedural delay in sanctioning of loans. A member can apply for the loans and on the basis of her application the group will discuss. Group also will assess the repaying capacity of the member who demanded loan. Different SHGs charge different interest rates and usually the interest rate is ranging between 8 to 13 percentages. No guarantee or surety is required to avail individual loan.

2. LITERATURE REVIEW

Anne Marie Golla, Anju Malhotra, Priya Nanda and Rekha Mehra (2011), in their article titled "Understanding and measuring Womens' Economic Empowerment-Definition, framework and Indicators" defined economic empowerment and its indicators. Economic empowerment is one of the most powerful routes for women to achieve their potential and advance their rights. Since women make up the majority of the worlds poor, meeting poverty reduction goals requires addressing women and their economic requirement Women who are economically empowered contribute more to their families, societies and national economies.

B. Lilly Grace Eunice and G. Purushothaman (2011) in their article titled "How far empowerment of women attained in India? Some issues" observed that many women in India are living in a pathetic condition. Globally

70% of the women are living in absolute poverty. Society denying their rights, and curtailing their opportunities. Women empowerment also include gaining greater share of control over as resources, materials, human and intellectual like knowledge, information, ideas and financial resources like money and access to money and control over decision making in home, community, society and nation and to gain power.

Audil Rashid Khaki and Mohi-ud-Din Sangmi (2012), in their article “Micro finance and self help groups: An empirical study” analyzed the role of microfinance in improvement of the life of SHG members in the Anantanag district of Jammu and Kashmir state. The study examined various factors like members’ demographic characteristics, micro finance utilization pattern, rate of interest charged by different banks, various financial institutions engaged in microfinance activities etc. They concluded the article with a remark that microfinance has a positive role in the success of SHGs in Jammu and Kashmir.

Irshad M K and R Sathyadevi (2015) studied about micro finance system of Kudumbashree Self Help Groups in Kerala and summarized their findings in their article titled “Women empowerment and Microfinance in Kerala”. In their study they found that micro finance is a powerful strategy of women empowerment in rural areas. Income of Kudumbashree members supplements their family income and women in rural areas attain self reliance through continuous involvement in micro finance activities. Microfinance plays a major contributor to financial inclusion. Kudumbashree micro finance system supplement commercial banking system in Kerala.

Shital Prakash Bhusare and Ruby Chanda (2017), examined various factors which increase the income level of SHG members in their article titled “Micro finance and Micro credit for sustainable development”. They studied about the role of SHGs in the sustainable development of rural areas. SHGs are using micro credit facilities to increase their income and to reduce poverty. Banks are not active in providing loans to the SHGs in the root level. The study further found out that interest rate charged by different financial institutions is very high as compared to SHG’s interest rate.

3. OBJECTIVES OF THE STUDY

The present study is conducted with the following objectives:

- 3.1 To find out the role of microfinance in the economic empowerment of women self help group members in the Padne Grama Panchayath, Kerala.
- 3.2 To evaluate the volume of micro loans created among women members of self help group in the Padne Grama panchayath, Kerala.
- 3.3 To analyse the pattern of utilization of micro loans by the members of Kudumbashree self help group members in Padne Grama panchayath, Kerala.
- 3.4 To study about the various demographic characteristics of the members of women self help groups in the Padne Grama panchayath, Kerala.

4. HYPOTHESIS OF THE STUDY

Micro finance has no significant effect on the economic stability of women self help group members in the Padne Grama Panchayath, Kerala.

5. METHODOLOGY

The study is mainly based on primary data collected from the women self help group members of the ward 3, ‘Kavunthala’, Padne grama panchayath, Kerala. 50 women self help group members are selected from 8 SHGs in ward 3. Total population of the study is 160 SHG members. Simple Random sampling without Replacement technique is used for collecting data from the population. Interview schedules are supplied to the respondents and their responses are duly recorded. Apart from the interview schedule, personal interview conducted with ADS (Area Development Society) chairperson and SHG members to elicit some data which is useful for the study. Descriptive statistics like Percentages, mean, standard deviation and inferential statistics chi square test are used to interpret the data.

6. DATA ANALYSIS AND INTERPRETATION

6.1 Age of the respondents.

AGE GROUP	NO OF RESPONDENTS	PERCENTAGES
18-30	3	6
31-43	12	24
44-56	26	52
56 and ABOVE	9	18
TOTAL	50	100

Table-1 Interpretation

52% of the respondents belong to middle aged group and only 6% belongs to the category of youth category. The participation of the age group above 56 years is better than youngsters. They are joined to empower their family rather than empowering themselves.

6.2 Occupation

OCCUPATION	NO OF RESPONDENTS	PERCENTAGE
NREG WORKERS	22	44
WAGE EARNERS	14	28
UNEMPLOYED	3	6
SELF EMPLOYED	11	22
TOTAL	50	100

Table-2 Interpretation

NREG workers dominated in the occupation followed by daily wage earners. Only 6% of the total respondents are unemployed. That means 94% of the SHG; members are earning income in one way or another.

6.3 Economic Status

STATUS	BEFORE JOINING		AFTER JOINING	
	NO OF RESPONDENTS	PERCENTAGE	NO OF RESPONDENTS	PERCENTAGE
APL	7	14	28	56
BPL	43	86	22	44
TOTAL	50	100	50	100

Table-3 Interpretation

86% of the respondents were in BPL category before joining in Kudumbashree self help group. But after joining in SHGs the rate of poverty reduced and percentage of BPL families slashed from 86% to 44%., that means 48% reduction in BPL families after joining in SHGs.

6.4. Amount of Microfinance Utilized

Amount micro loans	No of respondents utilized	Percentages
10000-25000	6	12
25001-40000	4	8
40001-55000	7	14
55001-70000	5	10
70001-85000	28	56
TOTAL	50	100

Table-4 Interpretation

The pattern of utilization of microfinance facility among members is analyzed. 56% of the respondents availed microloans between Rs70000 to 85000. On an average total 30 lakhs distributed among 50 members in 8 SHGs. Per capita distribution of micro loan is 60000 per individual.

6.5. Educational status

Education	NO OF RESPONDENTS	PERCENTAGE
PRIMARY	28	56
HIGH SCHOOL	16	32
HIGHER SECONDARY	2	4
DEGREE/DIPLOMA	0	0
ILLITERATE	4	8
TOTAL	50	100

Table-5 Interpretation

Majority of the SHG members are completed primary education and only 8% of the members are literate. There are no Degree or Diploma holders among SHG members. 32% completed their high school education.

6.6 Purpose For Which Micro Finance Is Utilized

PURPOSE	NO OF RESPONDENTS	PERCENTAGE
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HOUSEHOLD PURCHASE	8	16
CONSTRUCTION OF HOUSE	19	38
REPAYMENT OF EXISTING LOANS	14	28
EDUCATION OF CHILDRENS	3	6
MARRIAGE OF DAUGHTER OR SON	2	4
OTHER USES LIKE TREATMENT,PURCHASE OF ORNAMENTS ETC.	4	8
TOTAL	50	100

Table-6 Interpretation

SHG members utilized micro finance for varied purposes according to the preference of their need. The amount is mainly used for construction and renovation of their homes followed by repayment of existing loans. Existing loans with interest rate ranging from 9% to 13% is repaid and instead they depended on micro finance with interest rate ranging from 4% to 12%. Many of them availed low interest rate loans with government or NABARD subsidy. 6% of the respondent utilized microfinance for the education of their wards, 4% utilized for marriage of their daughter or son and 8% utilized for the treatment of their deceases. With the help of micro finance large number of SHG members purchased durable goods to their homes.

6.7 Income Of Members

INCOME	BEFORE		AFTER	
	NO OF RESPONDENTS	PERCENTAGE	NO OF RESPONDENTS	PERCENTAGE
0-3000	44		6	
3001-6000	5		31	
6001-9000	1		12	
9001-12000	0		1	
TOTAL	50		50	

Table-7 Interpretation

Before joining in SHGs 44% members are earning an income in between 0 to 3000. But after joining in SHGs, their income increased and 31% are earning income in between 3001 to 6000.

6.8 Economic Stability Through Microfinance

RESPONSE	NO OF RESPONDENTS	PERCENTAGE
HIGHLY IMPROVED	9	18
IMPROVED	34	68
NO RESPONSE	3	6
NOT IMPROVED	4	8
NEVER IMPROVED	0	0
TOTAL	50	100

Table-8 Interpretation

Likert’s 5 point scale is used to rate the response of the respondents. The scale 5 assigned to highly improved, 4 to improved, 3 to no response, 2 to not improved and 1 to never improved. 68% of the respondents opined that microfinance improved their economic condition and stability and only 8% are marked as not improved their economic condition. 18% of the respondents have the opinion that microfinance activities highly improved their economic condition.

7. TESTING OF HYPOTHESIS

The hypothesis of this study is Micro finance has no significant effect on the economic stability of the women self help group members in the Padne Grama Panchayath, Kerala. The hypothesis is tested with the help of inferential statistics tool, chi square test. Spearman’s correlation coefficient is used to test the direction of relationship between volume of micro finance and economic stability.

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Stability	50	3.9600	.75485	2.00	5.00
Microfinance	50	3.9000	1.46036	1.00	5.00

Stability

	Observed N	Expected N	Residual
2.00	4	12.5	-8.5
3.00	3	12.5	-9.5
4.00	34	12.5	21.5
5.00	9	12.5	-3.5
Total	50		

Microfinance			
	Observed N	Expected N	Residual
1.00	6	10.0	-4.0
2.00	4	10.0	-6.0
3.00	7	10.0	-3.0
4.00	5	10.0	-5.0
5.00	28	10.0	18.0
Total	50		

Test Statistics		
	stability	Microfinance
Chi-Square	50.960a	41.000b
Df	3	4
Asymp. Sig.	.000	.000

INTERPRETATION

The calculated p value is less than .05, hence we can reject null hypothesis and can accept alternative hypothesis, that micro finance has significant effect on the economic stability of members of Kudumbashree self help group in Padne Grama Panchayath. The above test clearly reveals that micro finance activities helped in the economic empowerment of the members of Kudumbashree self help group in Padne Grama Panchayath, Kerala. The economic status of the majority of respondents is changed from the state of below poverty line to above poverty line. On the basis of all these factors, micro finance has a positive effect on the economic empowerment of the members of SHGs.

SPEARMAN’S CORRELATION COEFFICIENT

Spearman’s correlation coefficient is used to rank the response in respect of volume of micro finance and economic stability of the respondents.

Correlations				
			MICROFINANCE	ECONOMICSTABILITY
Spearman's rho	MICROFINANCE	Correlation Coefficient	1.000	.500**
		Sig. (2-tailed)	.	.000
		N	50	50
	ECONOMICSTABILITY	Correlation Coefficient	.500**	1.000
		Sig. (2-tailed)	.000	.
		N	50	50
**. Correlation is significant at the 0.01 level (2-tailed).				

INTERPRETATION

The coefficient of correlation between volume of micro finance utilized and economic stability of the respondents is 5. It means there is a positive correlation between these two variables. When the volume of micro finance utilization increases then there is an increase in economic stability of the members and vice versa.

7 FINDINGS AND SUGGESTIONS

7.1 100% of the members are depending on Kudumbashree micro loans to meet their immediate requirements. They are not interested in the loans of commercial banks because of their strict formalities and procedures to avail small loans. Therefore, government should implement different micro finance schemes to cater to the needs of poor and weaker section of the society.

7.2. The interest rate charged by self help group is ranging from 4 to 12%. But the interest rate charged by commercial banks ranging from 7 to 13%. 50 paise per month on Rupees 100 is charged by the Kudumbashree SHGs. Subsidy facility should be strengthened to attract more people to become a part of micro finance system.

7.3. There is a wide range between the ages of members. Majority of the members are in middle aged group, who actively participate in activities. Youngsters are not interested to join in Self help group members because many of them are empowered at the cost of their parents, especially at the cost of their mother. Government should think about more micro finance schemes and programmes to attract youths.

7.4 Self help group members' economic status improved, but their education status has not been changed. Some of them are illiterate. In order to improve their educational status Government or its' agencies should start mass campaign or programmes to impart informal education to SHG members.

7.5 Members' income tremendously improved. An urge emerged in their minds to contribute to the income of their family. Now they are not spending their life in four walls, instead they are engaged in various productive activities which supplement their family income. More employment opportunities should be opened to women community to motivate them to become a part of developmental activities and growth of our nation.

7.6 Default rate is zero in the micro finance system of Kudumbashree self help groups. Women members earn their income from different sources and repay loans in time without fail.

8. CONCLUSION

Empowerment of women is crucial for the sustainable development of a country. Majority of women, especially in rural areas, are facing severe economic problems due to poverty and unemployment. After the commencement of Kudumbashree Mission, which promotes Self help groups and micro finance, poverty rate can be reduced remarkably. When women income supplements their family income, their financial problems can be reduced. Almost all Kudumbashree self help group members are utilizing micro finance facility to educate children, to construct homes, to repay high interest loans, to purchase of durable goods etc. Extending micro finance facility through SHGs will empower women as well as society.

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AUTOMATION AND IT's IMPACT ON STATE, MARKET AND SOCIETY

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ABSTRACT

“Threats of Mass Scale Unemployment Delta and De-Humanization of work spectrum are a General impression deducted from the theories of Automation and its anticipated impact on employment. It has been cited as a matter of grave concern by the most Social, Political, Economic, Cultural and technological stake holders.

This Research paper is a multidimensional study of automation and its time-tested impact on State, Market and Society.

However, Research findings are in absolute contrast with that of general opinion and reassures that the technological advancement and automation will prove to be a Boon and not bane for society.

The benevolent cause of automation will bring in social and economic transformation leading to higher prosperity.

“The flurrying waves at surface do not show the mighty turbulence in the depths of Ocean, the people at sea shore may never experience the essence of sea.”

INTRODUCTION

Over the centuries and past decades, we have observed empirically and through data analysis that technology has advanced. During the same period, even population has grown manifolds.

This research paper is an open-ended effort and seeks to investigate all round impact on various sectors in the economy. Work is factual analysis on all possible short and long-term effects of Automation. It is study of the impact on the domestic economy, inter-sectoral and intra-sectoral analysis ex-ante.

LITERATURE REVIEW

Many books, Journals, and Scholarly articles are written and presented repeatedly. The subject has drawn attention of many thinkers, researchers, socialists, and policy makers. However most of the literature available seems to be presumptive and missing the very essence of human instinctive behavior and tremendous adaptability shown over decades.

Most articles are into a partial analysis and do not provide a worth full realistic account of collating various sectors and interrelations thereof.

Significantly, overlooking has been of the facts along the time quotient and the perspective presented misses out short and long-term experiences of past, with respect to technology, employment, and employability. Today's dream becomes tomorrow's reality.

The best factual data based presentation proves all presumptive claims pompous and establishes the fact that technology has created more jobs than it has destroyed over last 140 years.

Source: <https://www.theguardian.com/business/2015/aug/17/technology-created-more-jobs-than-destroyed-140-years-data-census>

OBJECTIVE OF STUDY

- (1) To conceptualize, analyze and evaluate the idea of Automation and Employment.
 - (2) To understand and analyze the sector specific merits and demerits of Automation.
 - (3) Study of “Automation and unemployed youth- moving towards a social revolution?”
 - (4) Study of “Unemployment and response of state and its implications-labour movements, strikes, etc.”
 - (5) Impact on “Overhaul of industries and production- Machines versus humans.”
 - (6) Impact on “Automated work and specialized workers-Towards a new educational paradigm.”
 - (7) Impact on “Cultural mutation and social transformations- Impact on social institutions.”
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DATA COLLECTION & RESEARCH METHODOLOGY

Primary data collected through direct interaction with people from industry and academics, independent research groups, focused groups, labour union members.

Secondary data sources such as expert opinion and exclusive data research sources, specific articles on topics, other scholarly articles, government journals, and sites. Data is found to be quite useful and reliable.

Tertiary data sources as augmentative articles , opinions , past other researches, articles and magazines , newspaper articles , television (BBC) debates have been referred to a reasonable extent and been considered during forming research opinions.

Data collected was put for sorting, grouping and categorization and subsequently tabulated to make cooperative analysis over time. Trend were drawn and analyzed. While statistical methods are used to interpolate and extrapolate data for confirmatory analysis. Graphs and Charts are used to arrive at generalizations

OBSERVATIONS

CONCEPT

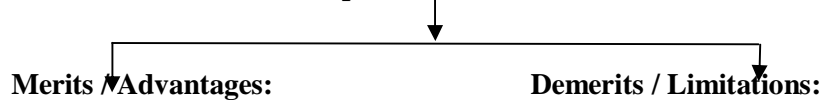
Automation: implies use of such technology through which Process and Procedure of production is performed with “No Human Interference or Reduced Interference.

Employability: Implies is (1) An ongoing process now and in future

- (2) Acquiring skills, abilities, attributes and qualifications
- (3) Stems from initiative, creative and competencies
- (4) That varies from individual to individual

A bird’s eye view:

Impact of Automation



• Higher Output	• Limited intelligenc
• Shorter processing time	• Threats and risks
• Better quality	• May cause disastrous accidents
• Reduced labour costs per unit	• High Initial Costs
• Standardization of product	• Technology changes
• Reduced accidents and errors	• Threats of obsolesion, hi replacement costs may eat into automation cost gains
• Mass scale production	• Lacks Customization
• Timely target management	• Typed production
• Precision and accuracy	• Not Suitable for Small outlets
• Less stoppages and breaks in production process	• Not suitable for startups and low capital enterprise
• Higher Skills	• Difficulties in changes in production line / business switchovers
	• Lacks adaptability and auto intelligence like humans in contingencies
	• Not suitable for all types of production.
	• Not a perfect substitute for labour.

Net implications of Automation on Economy: (Implications of “Rate of Adaption” and “Degree of Automation”)

Short Term: Low Impact Zone Factors: Causes of Slower adaption:

Therefore ‘no impact’ on employability of labour from a Macro Stand Point in practicality.

- (1) Reluctance to accept and implement until proven tested and tried
- (2) Smaller Business would continue to grow in size and numbers.
- (3) Nature and varied types of products, of buyer preferences, customization, natural goods

- (4) Lack and limitations of other infrastructural support needed for Automation.
- (5) Financial limitations and high initial costs that restricts the very pace of automation.
- (6) Compensating work opportunities due to higher income.



Source: Ref 2: (<https://www.theguardian.com/business/2015/aug/17/technology-created-more-jobs-than-destroyed-140-years-data-census>) The UK Labour Force Survey from the Office for National Statistics: A case study by Independent Economists for UK and Wales, found that a while menial, manuel and repetitive kind of woks like agro work force and laundry workers reduced drastically in numbers though the new higher demand surfaced for the personal care, grooming and other intellectual areas, which grew up rampantly.

Findings of the study: suggests and subscribes to the view technology, mechanization and automation has created more work opportunities than destroyed over last 140 years.

Nature of Rise

Nature of Drop

909% in nursing auxiliaries and assistants.	• 79% in weavers and knitters.
580% in teaching and educational support assistants	• 57% in typists
183% in welfare, housing, youth and community workers	• 50% in company secretaries
168% increase in care workers and home carers	• Huge decline in Agri sectors

A Partial impact” on employability of labour from a Micro Stand Point in practicality.

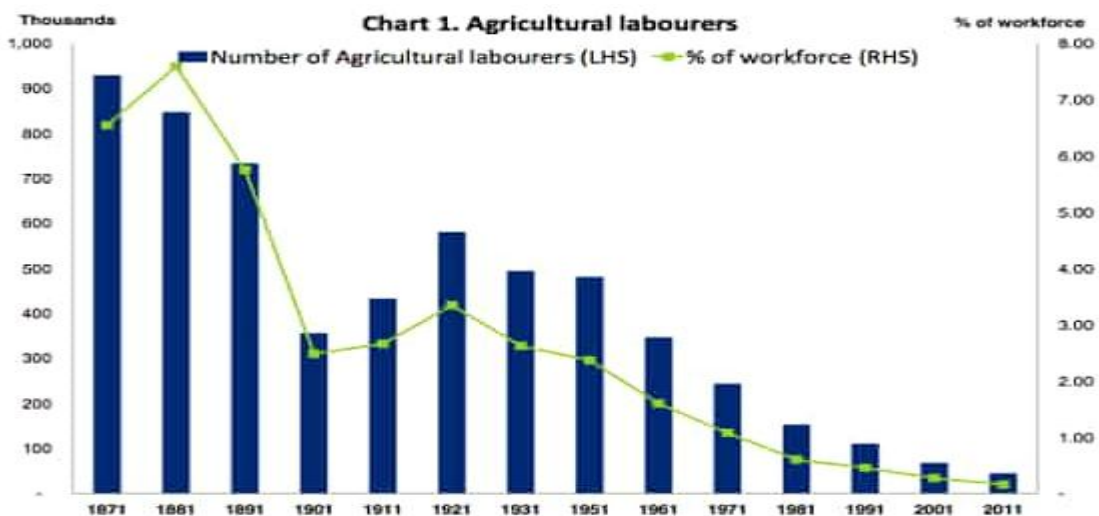
- (1) High precision section of industry but firms other functions / departments are least affected.
- (2) Hard repetitive work, menial though repetitive, hazardous though repetitive and work beyond human capabilities
- (3) Natural calamity instances like tsunamis, volcanoes eruption etc
- (4) Risky Ventures like surveillance

A “High impact zone” on employability of labor from a Micro Stand Point in practicality. Nature of work should be:

- (1) Economically viable
- (2) Mass Scale output
- (3) Repetitive
- (4) Non- intellectual
- (5) Non-Decision making
- (6) Largely Process industries or a part of production process.

Menial, Manuel work and / or Process industries and / or a part of production process i.e Production department

This sector is a key segment that poses a severe threat to labour employment and employability.



Source: Ref 2: (<https://www.theguardian.com/business/2015/aug/17/technology-created-more-jobs-than-destroyed-140-years-data-census>) The UK Labour Force Survey from the Office for National Statistics: A case study by Independent Economists for UK and Wales, found that a severe impact on employment occurred in Menial, Manuel and repetitive kind of woks.

IMPACT ON THE STATE, MARKET AND SOCIETY

State: Role, Impact- Gains, Liabilities and Expectation: in short term and over time:

Major Role: A) Producer C) Facilitator; Supply side correction and impact:

- (1) Upgrade technology high initial cost burden
- (2) Improved efficiency lesser per unit cost and higher revenue
- (3) Lower direct labour cost higher margins
- (4) Higher Production / output increased revenue
- (5) Lower Prices, Greater availability larger sale and higher revenues
- (6) Manpower training and development expenditure in immediate term
- (7) Long Term: Higher tax revenues direct and indirect

AS A FACILITATOR: GOVERNMENT MAJOR ROLE.

- (1) Promotion of Entrepreneurship and Enterprise- increased expense burden
- (2) Training and development of labour force- increased expense burden
- (3) Impetus to Demand and supply- increased expense burden at least inn short term.
- (4) Transfer Payments – due to higher production, reduced cost decreased expense burden
- (5) Trade promotion and Infrastructure Development- increased expense burden
- (6) Legal Frame work and Crime Control would be more sophisticated and therefore initial rise, however increased prosperity may bring in gains over time.

IMPACT OF TRANSITION

State and its organization would have to be prepared for a mental and structural revolution. Enormous initial responsibility and liability on account of Financial, Political, Legal and Productive and Social transition would ultimately lead to Economic growth and development over time.

MARKETS

Opportunities:	Threats:
Face change: Oligopolistic and Monopolistic	Face change: Creation of monopolies and Oligopolistic competition
Stiff / Higher Competition	Competition: Higher degree of control and concentration
Higher Outputs	Choice and Outputs: may decrease
Lower Prices	Prices: cartels may exploit
Specialization and exchange	Specialization and exchange: concentrated to few large Business houses
Gains from mass scale production, specialization and division of labour	Gains from mass scale production: Monopolist may not pass on to markets.
More Choices	More Barriers
Efficient resource utilization	Resource Idling
Larger Markets (Expansion): - Increased output, lower prices and rising population results in Volumetric and Choice of goods.	Markets: - may contract, difficult survival of small firms
Survival of Small Scale due to customization	Distortion in income distribution

IMPACT OF TRANSITION

Seen optimistically markets would be expanded, and flooded with superior quality products, Small and medium enterprise would have edge due to space for customization. Oligopolistic competition creates market stability, huge investments, mass scale production, and product improvisations. Small enterprises would augment their own niche markets.

Entrepreneurship would grow and more opportunities and choices shall be created.

Higher output, improved quality, more choices and lower average costs would ultimately benefit the consumer.

DEMAND AND SUPPLY—TECHNOLOGY DRIVEN GROWTH SPIRAL

Markets would tremendously benefit as a net effect of demand and supply growth spiral

Higher demand due consumer surplus shall create an expansionary delta for supply and

Eventually lead to all round growth, development and higher prosperity.

Society: Empirically it is seen that technology and employment improved and increased side by side. Technology May replace worker or make them more productive. However in either situation from a macro standpoint society as a whole tends to gain sooner or later.

- (1) Higher output and increased productivity
- (2) Higher productivity makes goods cheaper and increases profitability for firms
- (3) Higher profitability results in higher returns, payments and incentives to workforce.
- (4) Growing income and rising GDP results in incremental government revenues, leading to higher social welfare spending.
- (5) Over time downsizing government discretionary and autonomous pressures.
- (6) Raise in personal, corporate and public sector receipts creates optimism in the economy
- (7) Increase in Consumption and Investment spending trigger multiplier and accelerator effect.
- (8) This would create a demand for ancillary development of other industries, economy would move towards higher growth.
- (9) Skill development and cultural shift would take place.
- (10) Higher standard of living would prevail and domestic as well as global prosperity shall be achieved.
- (11) Emergence of new business and work opportunities.

SHORT TERM TO LONG TERM TRANSITION**A CONTEST BETWEEN DEVELOPING AND DEVELOPMENT DIVIDE**

The revolution in technology trends from the developed countries to developing countries and subsequently to third world countries. However due to established big business houses and mass scale production with a long term perspective may create severe limitations to them beyond an experimental basis. On the flip side, Developing countries provide a huge promise and premise for this benevolent cause implementation with vast markets and idle resources. However they suffer limitations of Capital to import the new technology. Perhaps the Presumption of Rationality would prevail bringing in the golden mean and lead to alleviating the global economic divide some day

INFERENCE: BEYOND THE WALLS OF VIRTUAL AND FICTION WORLD:

- (1). Process or production section might bring in partial decline in Labour employability, in specific situation and sectors.

HOWEVER IT WOULD BE COUNTER BALANCED DUE TO

- The fall in mass scale average production cost
 - The fall in average price level
 - Therefore increased demand
 - Fall in direct labour cost and
 - Increased productivity
- (2). **Causal-Effect relationship** of Automation and Employability is largely lopsided and populated towards “Net Employment Gains” on account of
 - Limited applicability
 - Financial limitations and Financial viability
 - Technology driven “growth spiral” (Demand-Supply Contest)
 - Expanded markets, Higher demand

(3). Optimistic, Rational, Future Generations would upbeat the technological and skill development trends. Promising and forward looking youth would revolutionize the concept of Product, Production, Market, and Employment forms.

HISTORY HAS PROVEN EVERY SUCH PRESUMPTION WRONG BY FAR.

- Sir Malthus “Theory of Population” sounded extremely logical though, retrospectively it is proven for its limitations.
 - Population has grown, Jobs have grown, Global Income has increased and global per capita income stands all time high despite multifold growth in population numbers.
- 4) State always assumes and plays a leading role during such transitions as producer, employer, and reformist in its own Socio-Economic- political interests.
- Sate would contribute through Productive, Financial, legal participation, and supply-side corrections.
 - Increased spending would lead to multiplier and accelerator effects.
 - Short Term might witness a threat perception of strikes and labour movement etc however subsequent benefits would be understood and accepted by all once Economic Growth and Economic Development begin to surface.
- (5). Firms and industries are the first gainers and would implement,
- More innovative ways of production,
 - Efficient and lean methods,
 - Higher training and development of human resource
 - Thereby Quantitative and Qualitative improvements in work place, work culture, production, process and services.
- (6) Change in technology would always bear a threat of specialized labour obsolescence though theoretically true, however it be short lived
- As humans have always shown resilience and adapted to newer challenges, skills and technologies.
- (7) Society on the whole would have a total positive culture shift, efficient production higher skills and education level; better standard of living would prevail.
- Governments would net out higher taxes
 - Private and Public sector would have technological improvements
 - Educational institutions would gear up and impart higher skill sets in education

CONCLUSION

Factual Study and data Analysis leaves no choice but to carry the optimism, that “Automation would create positive shift” in many ways,

Higher Skill Sets , Mindset Socially	Higher Skills employment
Nature of employment	Higher level of entrepreneurship
Forms of markets	Higher Income generating employment
Forms of work	Higher involvement of government in large investment, long gestation projects
Work Culture	Higher demand, wider choices and bigger markets
Higher Efficiency Level	Global in synch

“Global Economic Growth” and “Global Economic Development” would trickle down.

Social revolution would result in,

- A “Partial Shift” would take place in numbers of people employed in production and process section of industries that would be counter balanced by higher demand driven markets, more sophisticated jobs and newer opportunities due to market dynamism.
- Automation would prove to be a boon and result in Higher Employments and Employability.

- Technology is never a perfect substitute of human ingenuity, intelligence and ability to think, decide and act originally in dynamics of life, without any preplanned, preprogrammed set up.
- Artificial intelligence is an aid, a support to natural intelligence, they go together complementary and not otherwise.

There exists no battles between Man and Machinery and data analysis supports the view that technology has led “Job Creation and Not Job Cuts or Job Loss”

Easy to get into zone of negativity, but the past data analysis leads to realistic and factual optimism.

However, (1) the rate of automation and (2) the degree of automation would be key aspect to be warned, watched, and regulate at least in short term period.

REFERENCE & CITATION

(1) <https://en.wikipedia.org>

(2) <https://www.theguardian.com/business/2015/aug/17/technology-created-more-jobs-than-destroyed-140-years-data-census>

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ENVIRONMENTAL ACCOUNTING AND REPORTING OF INFORMATION TECHNOLOGY'S COMPANY IN INDIA

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ABSTRACT

Our planet is plagued by various environmental problems such as pollution, climate change, inadequate access to water, waste disposal etc. The IT industry has played an important role in enabling economic development around the world by directly and indirectly contributing various parameters such as employment, revenue and GDP etc. for the last 50 years. It is the social and legal responsibility on Information Technology companies to actively support for effective handling of e-waste management at industry and civil society level to protect our environment. The main objective of the study is to examine the environmental accounting and reporting practices followed by IT companies in India. An attempt has also been made to analyze the environmental accounting and reporting practices of selected five IT companies.

Keywords: Environmental Accounting and Reporting, Environmental expenditure and Information Technology Company

I. INTRODUCTION

Our planet is plagued by various environmental problems such as pollution, climate change, inadequate access to water, waste disposal etc. As per the one of the survey, recently The Indian Meteorological Department (IMD) declared 2018 was the sixth warmest year on record, with the average temperature over India being "significantly above normal". According to IMD, temperatures are increasing during both day and night time. Heat waves are increasing day by day. As a consequences, extreme rainfall and rainstorm which can cause floods. Kerala floods in August 2018 were due to heavy rains which are not conventionally flood prone. During 2018, six cyclone storms formed over the northern Indian oceans.

Pollution is one of the world's biggest and challenging environmental problems. Air pollution is the result of fossil fuel combustion, as well as various gases and toxins released by industries and factories. According to a Lancet Planetary Health report, one in every eight deaths in India is due to air pollution. Pollution and modern living go hand in hand, but the costs of air pollution can no longer. As the population and industries grow, so does the problem of waste disposal. E-waste is one of the emerging environmental problem in the developed and developing countries. A report on e-waste was released in the World Economic forum in Davos, report says that the waste stream has already reached 48.5 million tons (MT) and the figure is expected to double if nothing changes. India is ranked 5th in the world among top e-waste producing countries after USA, China, Japan and Germany.

The IT industry has played an important role in enabling economic development around the world by directly and indirectly contributing various parameters such as employment, revenue and GDP etc. for the last 50 years. According to the research done by Anthony Chan (2011) while the contribution of IT have beneficial all of us, the technologies have also generated huge quantities of electronic waste and consumed significant energy. There is regulatory framework to deal with safe disposal of e-waste but its impact has been limited. It is the social and legal responsibility on Information Technology companies to actively support for effective handling of e-waste management and at industry and civil society level to protect our environment.

Dr. V. K. Gupta's study reveals that companies are well aware of the facts that environmental issues will affect the business and industry in the near future and they are fully convinced of the need for environmental information and environmental accounting forms that part of accounting that deals with environmental concerns. As per study of Md Abdul K Masud, a very important function of environmental accounting is to bring environmental costs to the managers and motivate them to identify ways to reduce and avoid economic costs related to the environment and at the same time reduces the company's environmental impact. The main objective of the study is to examine the environmental accounting and reporting practices followed by IT companies in India. An attempt has also been made to analyze the environmental accounting and reporting practices of selected five IT companies.

II. REVIEW OF LITERATURE

Dr. Anita Shukla and Nidhi Vyas, (2013) The findings of the study shows that BPCL & ONGC are totally concern about the major issues of environment that directly hamper the environmental performance and they are totally agree that they should pay their duty with their best by providing fully information about environmental related disclosure, but industries provide only less information about the environmental related issues, and also not providing the information related to the environmental expenditure and environmental cost. Namitha K Cheriyan (March 2015), the study observed that Environmental accounting is an important measure for understanding the role played by natural environment in the development of an economy. It provides data that contains the contribution of natural resources to economic well-being as well as the costs imposed by environmental pollution and resource degradation. C.V. Baxi & Rupamanjiri Sinha Ray (Jan.2009), the findings of the study shows that the current business practices in Indian companies do not reveal substantive approach towards environmental and social disclosures and reporting.

Different researcher examined the existence of environmental accounting systems and policies of the corporate sectors but most of them did not focus on the disclosure of quantitative information in the annual report of companies. The present paper attempted to make a significant contribution to the existing knowledge in the area of environmental accounting and reporting of Indian companies and help in bridging the gap in the existing available literature.

III. OBJECTIVES OF THE STUDY

1. To analyze the extent of disclosure of environmental information of selected sample companies.
2. To examine the extent of disclosure of environmental expenditure of selected sample companies.

IV. METHODOLOGY OF THE STUDY

The descriptive research method is selected for this study and it is based on secondary data. For such data annual reports of five (05) sample companies have been consulted for the financial years 2014-15 to 2016-17. Random sampling method has been used to select sample unit. The present study is also based on secondary sources of data like books, journal articles, research papers, web-based sources. The sampling frame consists of five Indian Multinational IT companies in India: Tata Consultancy Services (TCS), Hindustan Computers Ltd, Tech Mahindra, Infosys and Wipro Ltd.

V. ANALYSIS AND INTREPRETATION OF DATA

The researchers studied the Annual Reports of the selected sample companies and analyse the Corporate Social Responsibility (CSR) spend in accordance with the section 135 of the Companies Act, 2013. The CSR projects covered by selected companies have been studied and analysed. Out of the total CSR activities the researchers examined in details that the projects undertaken for environment sustainability and spend on environment.

Tata Consultancy Services (TCS)

Table:-01

Financial performance of TCS (₹ in crore)			
Year	2014-15	2015-16	2016-17
Revenue	94,648.41	1,08,646.21	1,17,966
Total Expenses	72,069.58	80,024.21	87,674
Profit Before Tax (PBT)	26,298.49	31,675.87	34,516
Profit After Tax (PAT)	19,852.18	24,291.82	26,367
Earnings Per Share (EPS)	101.35	123.28	133.41

Source: Compiled through Annual Reports

Table:- 02

CSR and Envir. Expenditure of TCS (₹ in crore)			
Particulars	Years		
	2014-15	2015-16	2016-17
Average Net Profit	14,250	17,994	22,275
CSR exp. to be incurred	285	360	446
CSR exp. Spent	220	294.23	379.75
Environmental Expenditure	0.4	0.06	0.54
% of Envir. Exp. incurred on CSR	0.18%	0.02%	0.14%

Source: Compiled through Annual Reports

Table 1 depicts that the financial performance of TCS Ltd and table 2 depicts that CSR expenditure is less than budgeted in the year 2014-15, 2015-16 and 2016-17 by 22.82%, 18.26% and 14.85% respectively. Out of total CSR expenditure TCS Company has spent on environment is 0.18% in 2014-15, 0.02% in 2015-16 and 0.14% in 2016-17.

2. Hindustan Computers LTD (HCL)

Table:- 03

Financial performance of HCL (₹ in crore)			
Year	2014-15	2015-16	2016-17
Revenue	36,701.22	30,780.80	47,567.53
Total Expenses	28,723.62	24,707.10	38,100.2
Profit Before Tax (PBT)	9,117.06	6,969.14	10,542.75
Profit After Tax (PAT)	7,341.85	5,605.25	8,606.47
Earnings Per Share (EPS)	52.06	40.08	60.33

Source: Compiled through Annual Reports

Table:-04

CSR and Environ. Expenditure of HCL (₹ in crore)			
Particulars	Years		
	2014-15	2015-16	2016-17
Average Net Profit	4,499.27	6,106.44	6,458.17
CSR exp. To be incurred	89.99	122.13	129.16
CSR exp. Spent	6.16	12.36	40.96
Environmental Expenditure	0	0	1.56
% of Envir. Exp. incurred on CSR	0	0	4%

Source: Compiled through Annual Reports

Table 3 depicts that the financial performance of HCL Ltd and table 4 depicts that CSR expenditure is less than budgeted in the year 2014-15, 2015-16 and 2016-17 by 93.15%, 89.87% and 88.2% respectively. Out of total CSR expenditure Company has spent on environment is only 4% in 2016-17.

3. Tech Mahindra

Table:- 05

Financial performance of Tech Mahindra (₹ in crore)			
Year	2014-15	2015-16	2016-17
Revenue	22,621.3	26,494.2	29,140.8
Total Expenses	19,109.7	23,079.5	26,063.1
Profit Before Tax (PBT)	3,618.1	3,856.7	3,853.0
Profit After Tax (PAT)	2,658.6	3,026.6	2,850.9
Earnings Per Share (EPS)	27.46	34.51	32.14

Source: Compiled through Annual Reports

Table :- 06

CSR and Environ. Expenditure of HCL (₹ in crore)			
Particulars	Years		
	2014-15	2015-16	2016-17
Average Net Profit	1544	2070.1	3041.1
CSR exp. To be incurred	30.88	41.4	60.82
CSR exp. Spent	53.21	46.91	62.33
Environmental Expenditure	0	0	0
% of Envir. Exp. incurred on CSR	0	0	0

Source: Compiled through Annual Reports

Table 5 depicts that the financial performance of Tech Mahindra and table 6 depicts that CSR expenditure is more than budgeted in the year 2014-15, 2015-16 and 2016-17 by 72.31%, 13.30% and 2.48% respectively. Out of total CSR expenditure this company has not spent on environment.

4. Infosys

Table:-07

Financial performance of Infosys (₹ in crore)			
Year	2014-15	2015-16	2016-17
Revenue	53,319	62,441	68,484
Total Expenses	39,465	46,581	51,583
Profit Before Tax(PBT)	17,284	18,982	19,951
Profit After Tax (PAT)	12,372	13,678	14,353

Table:-08

CSR and Environ. Expenditure of Infosys (₹ in crore)			
Particulars	Years		
	2014-15	2015-16	2016-17
Average Net Profit	12,133	12,800	14,371
CSR exp. To be incurred	243	256	287.42
CSR exp. Spent	239.54	202.3	289.44

Earnings Per Share (EPS)	108.26	59.85	62.80
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Source: Compiled through Annual Reports

Environmental Expenditure	0	10.34	83.91
% of Envir.Exp. incurred on CSR	0	5.11%	28.99%

Source: Compiled through Annual Reports

Table 7 depicts that the financial performance of Infosys and table 8 depicts that CSR expenditure is less than budgeted in the year 2014-15 and 2015-16 by 1.42%, 26.54% and in 2016-17 it is increased by 0.7%. Out of total CSR expenditure this company has spent on environment in 2015-16 and 2016-17 is 5.11% and 28.99% respectively but the company has not spent on environment in 2014-15.

5. WIPRO LIMITED

Table:-07

Year	2014-15	2015-16	2016-17
Revenue	46,951.2	51,247.8	55,040.2
Total Expenses	38,176.6	42,571.8	46,955.8
Profit Before Tax (PBT)	11,224.1	11,524.7	11,039.3
Profit After Tax (PAT)	8,714	9,008.9	8,517.9
Earnings Per Share (EPS)	35.28	36.47	34.97

Source: Compiled through Annual Reports

Table:-08

Particulars	Years		
	2014-15	2015-16	2016-17
Average Net Profit	6,415.4	7,800.2	6,415.4
CSR exp. To be incurred	128.3	156	128.3
CSR exp. Spent	132.7	159.8	186.3
Environmental Expenditure	38.21	48.98	56.68
% of Envir. Exp. incurred on CSR	28.79%	30.65%	30.42%

Source: Compiled through Annual Reports

Table 9 depicts that the financial performance of Wipro and table 10 depicts that CSR expenditure is more than budgeted in the year 2014-15 and 2015-16 by 3.42%, 2.43% and 45.20% respectively. Out of CSR Expenditure Company has spent on environment is 28.79%, 30.65% and 30.42% in 2014-15, 2015-16 and 2016-17.

For comparing the environmental expenditure of TCS, HCL, Tech Mahindra, Infosys and Wipro companies the researcher calculated average of 3 years (2014-15 to 2016-17) of CSR and Environmental expenditure.

Table:-11

Particulars	Name of the companies				
	TCS	HCL	Tech Mahindra	Infosys	Wipro
Average CSR exp. Spent	640.81	19.82	102.89	227.09	159.06
Average Environmental Exp. spent	0.33	0.52	0	38.31	47.95
Average Environmental Exp. spent in %	0.05	2.62	0	16.86	30

Source: Compiled through Annual Reports

Chart-01: Average CSR and Environmental Expenditure (₹ in crore)

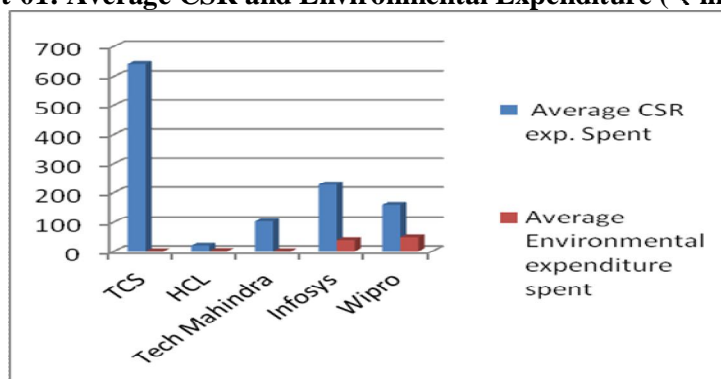


Table 11 and Chart 1 depicts that the environmental expenditure of TCS, HCL, Tech Mahindra, Infosys and Wipro companies have spent on environment out of the total CSR expenditure. TCS Company has spent on environment out of CSR is very less i.e. 0.05% only. In case of HCL, it has spent 2.62% which is also very less and Tech Mahindra has not spent on environment. Infosys has spent on environment is 16.86% which is more than TCS and HCL and Wipro Company has spent more than TCS, HCL and Infosys i.e.30%.

VI. CONCLUSIONS AND FINDINGS

1. The selected company is confined to their CSR activities to the activities referred in the Schedule VII of the Companies Act 2013. All selected companies has given report on CSR in the specified format in the Board's report and showing activity wise distribution of budgeted and actual spent on CSR in their Annual Reports.
2. Out of 05 companies, 04 companies have spent on environmental projects. Wipro has spent (30% out of total CSR) more on environment than other selected IT companies. Infosys has spent 16.86% on environment after Wipro Company.
3. HCL have spent (2.62%) less amount on environment out of CSR expenditure as compared to Infosys and Wipro but as compared to TCS (0.05%) it has spent more than HCL in spite of its CSR is less than TCS.
4. Tech Mahindra has spent CSR more than budgeted CSR but not spent on environment. It has spent entire CSR amount under the projects employability and for school and technical education.
5. According to the percentage of Environment spending on CSR, Wipro Ltd secured the highest position with 30% and has spent for ensuring environmental sustainability and ecological balance under the projects water, energy conservation, Biodiversity, waste management and sustainability and advocacy and research.
6. TCS has spent for tree plantation and Infosys has spent for Biomass cook stove project.

Today India is one of the most important IT's producers in the world and contributes at seven (7%) percent at global level but according to Anthony Chan (2011), Information Technology (IT) is a double edged sword: while it generates electronic waste and consumer precious energy resources, it can be part of a solution towards sustainable consumption. A responsible corporation can make significant difference by aligning their resources, energy and commitment with their problems in purposeful way.

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FINDING THE ATTIC ROOM: A STUDY OF ANITA NAIR'S LADIES COUPE

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ABSTRACT

Anita Nair is an internationally recognized name in the contemporary literary world. Anita Nair has evocatively presented different layers of human experience in her fiction. Her women question their stifled existence and seek a life of independence and freedom. The loss of an identity or selfhood in the globalized world has become a fundamental question. Indian women generally lack courage to voice their tribulations against the restrictions and prohibitions of existing social order. Anita Nair is a prolific writer who through her writings portrays women's exemplary courage and indomitable spirit. This paper aims to delve deeper into the conflicts that arise in the mind of the chief protagonist, Akhila. She pines for strength and independence. Her identity and her real-self seem to have lost in the world that permits little scope for freedom. The novelist draws a special attention to emotional psyche of Akhila who endeavors to find solutions to unanswerable questions that have disturbed her spinsterhood. Anita Nair's *Ladies Coupe* unfurls the story of Akhila's quest for self-image and her claim for independence and space. The most crucial issue regarding woman's identity, individualism and assertion is discussed in *Ladies Coupe*. At its best, the novel is a remarkable creative achievement.

Keywords: suffering, self-identity, feminism, womanhood.

Anita Nair has evocatively presented different layers of human experience in her fiction. Anita Nair confesses that, "She writes about ordinary lives and look for answers through fiction and she also confesses she has no literary pedigree attached to her. She feels that research is necessary to give the whole flavor of the period and stuff, to talk about how period changes" (Jagpal 50). In the words of Anju Jagpal, "The contemporary women novelists are trying to portray realistically the predicament of modern women torn between forces of tradition and modernity, their sense of frustration and alienation, the emotional and psychological turmoil and complexities of man-woman relationship and subtleties of feminine consciousness against patriarchal social set-up" (Jagpal 8). Khushwant Singh after reading *Ladies Coupe* said, "Anita Nair is a discovery: a born story teller with a style of narration which compels reading. She is young. She will get to the top" (Jagpal 49). *The Daily Telegraph* in its review said, "Nair is a powerful writer: all of these stories are intense and replete cultural detail...Nair has created what must be one of the most important feminist novels to come out of South Asia" (qtd in Monahar 129). Geetha Doctor in review of the novel, "She's Got a Ticket to Write" praises Nair: "In flood of women's writing' that depicts women as battered, bartered and abandoned on the shoals of selfworth, Anita Nair's second novel tides triumphantly against the tide"(qtd. In Manohar 130). In regard to characterization, Akhila is one of the most intriguing female characters in *Ladies Coupe*. Akhila, the protagonist thrives for an identity of her own and sets out for a journey to Kanyakumari: "This is the way it has always been: the smell of a railway platform at night fills Akhila with a sense of escape... Of leaving. Of running away. Of pulling out. Of escaping" (*Ladies Coupe* 1). She locates a way in order to fill the empty space of her life. Akhila sees a man on the railway station accompanied with relatives and she could draw a comparison with her own life: "Akhila looked at the man who carried on his shoulders the burden of other people's dreams. That she knew all about. That she could understand" (*Ladies Coupe* 9). Akhila, a forty-five year single woman works in income-tax office. Akhila sacrifices her aspirations and inner desires at the altar of her family and is looking for an affirmative resolution: "Dreaming of escape and space. Hungry for life and experience" (*Ladies Coupe* 2). Anita Nair clearly depicts Akhila's inner conflict and struggle. Akhila devoted her whole life to her family after her father's death. She did not shirk her responsibilities and duties. Soon after her father's death two things happened, "Sundays became just another day of the week and Akhila became the man of the family" (*Ladies Coupe* 75). In their minds, "Akhila had ceased to be a woman and had already metamorphosed into a spinster" (*Ladies Coupe* 77). In the process of serving the family she completely forgets herself. When Narsi told the family that he was going to marry the principal's daughter, "No one could fault with his choice and there was nothing anyone could say except perhaps – Don't you think you should wait for your elder sister to get married before you think of a wife and a family? But who was to mouth this rebuke?" (*Ladies Coupe* 77). Akhila's brothers Narayan and Narsi had their weddings in the same hall and on the same day and time. Amma and her brothers never asked: "What about you? You've been the head of this family ever since Appa died. Don't you want a husband, children, a home of your own?" (*Ladies Coupe* 77). Surprisingly her own mother does not sympathize with her daughter's loneliness and single status. Akhila feels humiliated when her mother suggests her to seek her brothers' permission before going out. Even her own sister's reaction is astonishing: "Padma was suspicious of everything she did or said." (*Ladies Coupe* 4). Akhila wants to be understood as she feels

trapped: “Amma, I’m the their elder sister. Why should I ask them for permission first” (*Ladies Coupe* 150). Without masking her disapproval, Amma replies: “You might be older but you are a woman and they are the men of the family” (*Ladies Coupe* 150). For Akhila it is sure eroding of identity that leads to total loss of individuality. There was nobody in the family who could understand her. She is reminded often of a Tamil film she had seen some years ago whose heroine is just like Akhila “Who was destined to be nothing more than a work-horse. A woman who gives up her life and love for the family” (*Ladies Coupe* 84). Reminded of it even after ten years Akhila: “felt darkness lick at her. Would her life end like the life of the woman in the film?” (*Ladies Coupe* 85). The novelist deals with the problems and frustrations of Akhila who is caught in the web of a conservative society. “Akhila had long ceased to wear bright colours, choosing to hide herself in drab moth tones” (*Ladies Coupe* 4). These circumstances curtail her freedom and do not allow her to live independently. The impact of these forces on her personality is hard to ignore and she wanted to free herself from such a control. It seems that she was completely governed by them. The novel describes her progression towards self-realization and restores in her a quest to live her own way. Akhila wanted an emotional support, maybe a companion that could give meaning to her life. She starts questioning her own life: “So who was Akhilandeswari? Did she exist at all? I she did, what was her identity?” and she finds out that she is, “Akhilandeswari . Mistress of all worlds. Master of none” (*Ladies Coupe* 84). What Akhila missed the most was that no one ever called her by the name any more. Her brothers and sisters had always called her Akka, Elder Sister: “At work, her colleagues called her Madam ... And Amma had taken to addressing her as Ammadi. As though to call her by her name would be an affront to her head-of-the-household status” (*Ladies Coupe* 84). In the words of Vrinda Nabar, “ most families still feel a sense of irrational horror at the thought of a daughter remaining unmarried even if she is economically independent and seems reasonably self-contained”(74). But Akhila was determined to confront and break the shackles: “She would go. She had to, or she would go mad confined within the walls of the house and the life she was expected to live” (*Ladies Coupe* 4). This depicts her inner turmoil and her craving for independent life. Life had become mundane for her and she wanted to make it a meaningful existence: “I will board a train and allow it to lead me into a horizon I will not recognize” (*Ladies Coupe* 8). Having failed to define her identity she decides to buy a ticket to Kanyakumari where “Vivekananda flung himself into the churning waters and the salts of the three seas and swam to rock upon which he sat resolutely, waiting for answers that had eluded him all his life” (*Ladies Coupe* 3). In this incredible story, Anita Nair tries to unravel the complexities of her existence. It’s a journey of self- exploration and self- discovery. She wanted to realize her actual self. She wants to give more sense to her own life. Stepping out of home is justified as she was in quest for her real self, her true identity. This brings a metamorphic change in her and the journey of Kanyakumari marks turning point in her life.

The title *Ladies Coupe* itself is very significant as it refers to the ladies compartment in a train where Akhila meets other women. The novel candidly captures and portrays the experience of these women. Akhila’s plight is depicted when she says: “As far as I am concerned, marriage is unimportant. Companionship, yes, I would like that. The problem is, I wish to live by myself but everyone tells me that a woman can’t live alone” (*Ladies Coupe* 21). Akhila meets Hari, who is twenty eight years old, quite younger to her. Subsequently she gets involved in a love affair. In her own words: “Loving him came naturally and when he turned to her with longing, her body was there to please and delight. And in his rapture, Akhila revelled, knowing that even if she was older than him, her body was still firm and that she pleased him” (*Ladies Coupe* 148). Akhila drags herself back from such a relationship and decides to end relationship with him. Akhila’s life had become cheerless but she was determined never to see him again. She was caught in a whirlpool of unfulfilled desires. Further, when Akhila comes out with a proposal of living alone and Padma remarks that she needs her brothers’ permission, Akhila retorts: “For heaven’s sake, I don’t need anyone’s consent. Look at me, I’m forty-four years old. And older than all of you. I will do exactly as I please and I don’t give a damn about what you or anyone else thinks...” (*Ladies Coupe* 204). The transition comes even in her attitude and she feels her freedom should not be disturbed by anyone. Her situations are discussed realistically as in one of the conversations with Narayan, her elder brother she says firmly: “For twenty-six years, I gave all of myself to this family. I asked for nothing in return. And now when I wish to make a life of my own, do anyone of you come forward and say—It’s time you did this Akka. You deserve to have a life of your own” (*Ladies Coupe* 206)”. Towards the end Akhila feels a sense of rejuvenation: “For within me is a Woman, I have discovered.” (*Ladies Coupe* 206). The stories of the fellow travelers motivate her to find a new direction in life. At Kanyakumari a young man called Vinod got attracted towards her but this time she profoundly yearns for him. She showed her desire for freedom by seducing him at Hotel Sea Breeze. With this final act, Akhila liberates herself from all fears and agony that had occupied her mind. She feels free and attains the sense of power within herself. Akhila fights for rightful space and freedom in the society. She wants her personal freedom and her own choice of life. She began to have real understanding about herself. As the narrator says: “A lust which involves, sustains and withdraws into itself. A

lust that radiates the heat of fire. The energy that defines life. Akhila is lust. Akhila is Sakti. Akhila is Akhilandeswari decimated into ten entities” (*Ladies Coupe* 274). Akhila is compared with ten different forms of goddess Sakthi: Kali, Tara, Sadosi, Bhuvaneshwari, Bhairavi, Chinnamasta, Dhumathi, Bagala, Matangi and Kamala. In searching for meaningfulness of life, she decides to contact Hari because now she has “the courage to pick up from where she left off and begin again” (*Ladies Coupe* 275). Akhila gets a new direction to rediscover her privileges and pleasures. Anita Nair says, “I wanted to show the quality of strength in a woman in this novel. I am not a feminist but I feel strength is not usually considered a womanly thing. There is a lot of strength in women that doesn’t come out naturally, it has to be forced out of them—it could be circumstances or a change in lifestyle” (qtd. in Manohar 129). After experiencing many conflicts she emerges as an emancipated woman with new outlook towards life. The author depicts this metamorphosis as a revolutionary step.

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THE STUDY OF EDUCATION AND HEALTH IN INDIA**Prof. Jawale Gautam R.**Assistant Professor, P. D. Karkhanis College of Arts & Commerce, Ambernath

INTRODUCTION

The objectives of any development policy is increasing standard of living of the people with increasing development opportunities for all. To increase welfare of a common man education and health is must. Over the years the value of the HDI of India which is depend upon three things as a long and healthy life, to be educated knowledge and enjoying a decent economic standard of living is increasing in comparison of the some of the Asian countries as Bangladesh, Srilanka the value of HDI of the India is remaining low due to the non-income factors as health and education, so on this background it is important that to study the situation of health facilities and education facilities and the policies of the government to improve the condition of education and health.

OBJECTIVES

Objectives of the research paper are given as follows

- ❖ To study the situation of education in India.
- ❖ To study the situation of health in India.
- ❖ To study the government policies with respect to education
- ❖ To study the government policies with respect to health
- ❖ To study the importance of education & health for economic development
- ❖ To study the importance of education & health for human development

IMPORTANCE OF EDUCATION AND HEALTH

The importance of the education and health in the process of the economic and human development is discussed below

- **Accelerates economic growth:** Economic growth can be accelerated on the basis of the improvements in the education and health. With help of the improved health and education the process of industrialisation can be taken forward, new methods of production can be introduced, skilled and healthy workers make better use of resources also inequality ,poverty and unemployment level can be brought down.
- **Controls population growth:**Population growth is our urgent need is our urgent need and easily it can be achieved with help of the improvement in education and health. higher level of literacy and good health facilities can control birth and infant mortality rate improving life expectancy, controlling population
- **Improves quality of life:** Improvement in health, hygiene, demographic profile, life expectancy and literacy levels is affected by the improvement in education. Education holds the key for increasing the quality of life through appropriate utilization of available resources, opportunities and facilities
- **Increases efficiency of the people:**Improvement can be done in the efficiency of the people on the basis of adequate availability of the drinking water, sanitation, control of diseases can be done because these components increases nutritional content of food. Increased physical and intellectual efficiency of the people leads to higher productivity and higher economic growth.
- **Improves resource utilization:** The workers having knowledge and skill can make better use of resources as capital and other resources of production, because education and health increases capability of human resources which make better use of other resources.
- **Contributes to economic change:** Education changes attitudes of the people, in the case of jobs and places rational choices are done, these changes motivate to the people to work ,to take risk, and to earn, also leads to the development of entrepreneurship qualities. all these changes create a modern economy.
- **Higher returns:** Long term very much better return are given by the investment in education and health. The social rates of return on investments in all level of education and health exceeds much more than the long term opportunity cost of capital

- **Long lasting investment** : Investments in the health and education is having long lasting effect on the economic growth and development instead of money invested in material resources having short run development

POLICIES OF THE GOVERNMENT WITH RESPECT TO EDUCATION

At the international level India committed to the millennium development goals and education to for all, at the national level there is the commitment under the national common minimum programme for increasing public expenditure on education to 6% of GDP and for universalizing elementary education.

GOVERNMENT POLICY MEASURES TO PROMOTE EDUCATION

❖ **SARVASHIKSHA ABHIYAN / RIGHT TO EDUCATION**

The Sarva shiksha abhiyan / Right to education includes the children between the age of 6 to 14 years and mandates that every child has the right to have elementary education of satisfactory and equitable quality in a formal school, this act has been enforced from April 2010. The achievements of the SSA till 2013-14 include opening of 3.57 lakh school buildings, construction of 15.9 lakh classrooms and appointment of 15.1 lakh teachers and in service training for 53.3 lakh teachers.

❖ **NATIONAL PROGRAMME FOR EDUCATION OF GIRLS AT ELEMENTARY LEVEL: (NPEGEL)**

This program was approved in July 2003. the objective of the scheme is to provide support for education of underprivileged/disadvantaged girls at the elementary level, under this scheme a model school will be established in every cluster which will make the supervision of girls enrolment in schools. This scheme is implemented in 3286 educationally backward blocks in 25 eligible states.

❖ **KASTURBA GANDHI BALIKA VIDYALAYA**

This scheme was launched in July 2004 to set up residential school for girls belonging to the SC/ST/OBC and minorities in the backward areas and where the female literacy rate is below national average. The funding of this scheme will be done between the centre and state as the ratio of 75:25, there are 3367 Kasturba Gandhi Balika Vidyalaya in 26 states, 283 lakh girls was enrolled in KGBVs

❖ **NATIONAL PROGRAMME OF MID-DAY MEALS IN SCHOOLS**

With effect from September 2004 mid day meals scheme was revised and universalized at primary level. Cooked meals are given to the children studying in government, government aided and local body schools. In 2013-14 10.86 children were covered under this scheme 13,215 crore were allocated for this programme.

❖ **SCHEME FOR UNIVERSALISATION OF ACCESS TO SECONDARY**

During the eleventh five year plan centrally sponsored scheme as universalisation of access to secondary was decided to start. The aim of the scheme was universalization of secondary education, improvement of quality of secondary education for the students having the age group of 15-16 years.

❖ **RASHTRIYA MADHYAMIKSHIKSHAABHIYAN (RMSA)**

This scheme was launched by the government in 2009 to improve the access of secondary education also achievement of 75 percent for enrollment ratio for the classes IX to X with 05 years. funding pattern will be 75:25 percent between center and states, during 2013-14 government released 3,046 crore for implementing this scheme to the states.

❖ **INCLUSIVE EDUCATION FOR THE DISABLED AT SECONDARY STAGES:(IEDSS)**

In 2009-10 this scheme was launched, it provides 100 percent central assistance for inclusive education of disabled children studying in classes IX-XII in government, local body and government aided schools. The scheme provides for personal requirements of the childrens in the form of assistive devices, helpers, transport, hostel, learning material and scholarship for the girl child up to rs.3000 per disabled child per annum

❖ **SAAKSHAR BHARAT/ADULT EDUCATION**

National literacy mission was renamed as saakshar bharat. The Saakshar bharat was launched on 8th sep.2009. The programme is including basic literacy to the non literates, reinforcement of the literacy skills to the non-literates. by the end of November 2012, 372 out of 410 eligible districts had been covered under this programme comprising of 4,386 blocks and 1,61,219 gram panchayats.

ACHIEVEMENTS IN EDUCATION

The various policy measures have resulted in the improvement in the education. Progress of education in discussed as follows

❖ **RISE IN ENROLMENT**

The private school enrolment of 06 to 14 years old has risen steadily from 18.7 percent in 2006 to 28.3 percent in 2012.the proportion of schools without libraries has declined from 28.7 percent in 2011 to 23.9 percent in 2012.

❖ **RISE IN LITERACY RATES**

The literacy rate for the country as whole increased from 18.3 percent in 1950-51 to 52.2 percent in 1990-91 and then 64.8 percent in 2000-01. The literacy rate has improved to 74 percent in 2010-11.the whole picture of the literacy can be seen with help of the following table.

PROGRESS OF LITERACY RATE

Year	Total	male	female
1950-51	18.3	27.2	8.9
1990-91	52.2	64.1	39.3
2000-01	64.8	75.3	53.7
2010-11	74.0	82.14	65.46-

Source: Economic Survey 2012-13,A-2

❖ **IMPROVEMENTS IN HIGHER EDUCATION**

The Indian higher education system is one of the largest in terms of number of colleges of universities. While at the time of independence there were only 20 universities and 500 colleges with 0.1 million students their number has increased to 757 universities and university level institutions and 38,056 colleges up to 2014-15

GOVERNMENT POLICIES FOR THE HEALTH

Being healthy population is one of the pre-conditions of economic development, because when a country has healthy population then efficiency of the people increase, it helps to control population growth, general welfare of the people increases, life expectancy and quality of the life of the people increases. Policy measures undertaken by the government to improve health are discussed below.

❖ **National Health Mission**

The national health mission was launched in 2013 to enable universal access to equitable, affordable, and quality health care services. national health mission has two parts first is national rural health mission (NRHM)and national urban health mission(NUHM) at village level awareness about diseases prevention is done, at cities slum-dwellers and other marginalized groups are covered having the population of 50,000.the total outlay under the NHM for the 2013-14 was 18,775 cores.

❖ **STRENGTHENING OF PRIMARY HEALTH INFRASTRUCTURE AND IMPROVING SERVICE DELIVERY**

During the last four years the central and state governments have taken several initiatives such as strengthening or relocating primary health centers, use of mobile health clinics, improving the logistics of supply of drugs and consumables and handling over of primary health centers to NGO.

❖ **REPRODUCTIVE AND CHILD HEALTH PROGRAMME**

The second phase of this programme was launched on April 1 ,2005,it is aiming to reduce maternal and infant morbidity and mortality and unwanted pregnancies thus leading to stabilization of the population.

❖ **UNIVERSAL IMMUNIZATION PROGRAMME**

This program was launched in 1985 in urban areas, but gradually entire country was covered. To control vaccine-preventable diseases namely, childhood tuberculosis, diphtheria, pertussis and tetanus vaccines are given to infants and pregnant women.

❖ **PULSE POLIO PROGRAMME**

An outbreak of polio has been witnessed in the recent past with the spread of polio virus. to respond to this supplementary immunization activities have been intensified in the high risk areas.

❖ **NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME : NVBDCP)**

A programme controlling and preventing vector borne diseases. Malaria, dengue, and chikungunya are control under this programme. the emphasis is on avoidance of mosquito-breeding conditions in homes and work place ,rapid diagnostic tests for quick detection of malaria cases are also being scaled up.

❖ **THE REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME :(RNTCP)**

This program was implemented since 1997 and the entire country was covered by the march 2006. The use of directly observed treatment short courses strategy was done. Under the programme, quality diagnosis and treatment facilities including a supply of anti-TB drugs are provided free of cost to all TB patients.

❖ **NATIONAL AIDS CONTROL PROGRAMME:(NACP)**

The first phase of this programme was launched in 1992, the second phase was launched in 1999 with two key objectives namely, to reduce the spread of HIV infections in India and strengthen India’s capacity to respond to HIV/AIDS on a long term basis these objectives are achieved through prevention among high risk groups and among the general population and providing care and support services for people living with HIV and AIDS.

❖ **NATIONAL LEPROSY ERADICATION PROGRAMME**

Leprosy services have been completely integrated with the general health care system. The programme also have been decentralized in all the states.

❖ **CONTROL OF NON-COMMUNICABLE DISEASES**

Non communicable diseases continue to be important public health problems in India .they are responsible for sizeable mortality and morbidity. Ageing population shows manifestation of cardiovascular diseases, cancer and mental disorders which also result in high prevalence of chronic disability. Thus measures are taken to control blindness, improving mental health facilities and so on.

❖ **PRADHAN MANTRI SWASTHYA SURAKSHA YOJANA**

It was launched with the objective of correcting regional imbalances in the availability of affordable/reliable tertiary health care services and to augment facilities for quality medical education in the country. The PMSSY has two components in its first phase as setting up of 6 all India institute of medical science (AIIMS) like institutions.

ACHIEVEMENTS IN HEALTH CARE

There was marked expansion in health infrastructure in India, this has been created by the government, voluntary, and private sectors. These achievements are shown in the following table.

Item	Current levels (2012)
1.Sub centers /primary health centers/community health centers	1,77,248
2.Government hospitals(Rural and urban areas)	35,416
3.AYUSH dispensaries and hospitals	27,586
4.Nursing personnel	21,24,667
5.Doctors (modern system)	8,83,821

Source: Economic Survey 2013-14,p.248

❖ **MARKED EXPANSION IN HEALTH INFRASTRUCTURE**

There was marked expansion in health infrastructure in India, this has been created by the government, voluntary, and private sectors, but one thing is very true that in relation to the needs of our population it is highly inadequate.

❖ **DECLINE IN MORTALITY**

Extension of infrastructure network and technological advances has resulted in decline in mortality. India is reaching to the UN millennium development goals with respect to maternal and child survival. Maternal mortality ratio as per millennium development goals is 140 per 100000 live births while India achieved 178 by 2010-12 and is estimated to reach 141 by 2015.

❖ **INCREASE IN LIFE EXPECTANCY**

The life expectancy at birth for males and females has risen from 37.2 and 36.2 years respectively in 1951 to 65.8 and 69.3 years respectively during 2009-13

❖ **CONTROL OF DISEASES**

For controlling communicable and non communicable diseases like Malaria, Tuberculosis, Leprosy, Blindness, Cancer, AIDS etc..national health programmes are implemented. Annual incidence of malaria comes down. The prevalence rate of leprosy has come down to 0.69 per 10,000 population by march 2011.Under the revised national TB programme the cure rate has improved to 08 out of 10 patients from about 04 out of 10 in the earlier programme.

CONCLUSIONS

- There is continuous rise in the enrolment in the schools.
- There is a substantial improvement in the total literacy rate of India during 2000-01 to 2010-11.
- Female literacy rate is remaining low in comparison of male so it has to be increased.
- Higher education sector registered impressive growth in terms of number of college and universities but still as per increasing demand of the students, it has to be more improved.
- There is marked expansion in health infrastructure.
- Life expectancy has improved as result of health infrastructure.
- India has a very big success in controlling communicable and non communicable diseases like Maria, Tuberculosis, Leprosy, Blindness, Cancer, AIDS.

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‘OF EYES AND EARS’: THE SHAPE POEMS OF MAY SWENSON**Dr. Supala Pandiarajan**

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May Swenson (1919-1989) is an award-winning American poet, critic, playwright and translator. She was born in Logan, Utah into a pious family. She was the eldest of ten children of Swedish parents who had moved into the United States in the 1920s. After completing her graduation from Utah State University, Swenson initially took up a job as a journalist. She then served as the editor New Directions Press for seven years. She served as ‘Poet-in-Residence’ at several Universities and this gave her the time, money and space to pursue her passion of writing poetry. Swenson was the Chancellor of the Academy of American Poets from 1980 to 1989. She died at the age of seventy-six in 1989 at Delaware.

Swenson identified herself to a tradition of Imagist poets. Imagism, as a cultural movement, made its impact on all arts especially during the first three decades of the twentieth century. The Imagist poets aimed at deconstructing the traditional ideas and conventions that governed the writing of poetry down the previous centuries. They pioneered a new poetry movement by rebelling against the moralizing attitude of traditional poetry.

After the end of the grand era of poets like Frost, Williams Carlos Williams and Roethke, the next generation of poets were compelled to establish a new style of their own. The new style opted by the Imagists was to experiment with the form of poetry. May Swenson “is an experimental poet in the sense that she has found patterns of speech that allow her to distinguish her own voice from the chaos of contemporary politics, and from the mere formlessness of contemporary poetry” (*CLC* Vol. 61 393). She is well known for her shape-poems.

Shape poems are distinct in the sense that they are rendered in a visual form associated with the subjects or objects discussed in them. While conventional poetry stressed on the need for a form, Shape poetry reacted to this cliché by arranging the words on page in the shape of what the poem wanted to convey. It is the result of an epiphany that mere language becomes insufficient for complete expression of meaning. Swenson often plays with the shapes of her poems and coined the term ‘Iconographs’, which is also the title of her collection of shape poems. The word ‘Icono’ is derived from the Greek word, ‘eikonos’ meaning ‘image’ or ‘likeness’. The word ‘graph’ is from its Greek ancestor ‘graphe’, which means to carve. Swenson’s collection, *Iconographs*, contains forty-six poems, each of which has unique shape. Angles, curves, unexpected spacing and capitalization have been used in Swenson’s poetry, which remind us of Cummings and Emily Dickinson. Swenson’s aim was “to cause instant objet-to-eye encounter with each poem even before it is read word-by-word, to have a simultaneity as well as sequence” (*Shakespeare’s Sisters: Feminist Essays on Women Poets* 224). In poetry, the function of a metaphor is to create “verbal equivalents for non-verbal experience” (Ostriker “May Swenson and the Shapes of Speculation”). In Shape Poetry, shape functions as the metaphor. The text first verbalizes the experience; the visual shape heightens the experience. Swenson has sculpted a unique shape for each of her poems in *Iconographs*, thereby making each of her poems strike her readers both visually and verbally at once.

Patterns are made in Swenson’s shape poems by arranging lines and spaces of the poem on the page according to the subject. Some words are emphasised by being distantly placed from other words or by repetition. Punctuations and the use of capital letters or the lack of these are arranged for visual effect.

The building of the poems on the page is not related to form alone, but reflects the poet’s keen observation of the object that has been portrayed in the poem. The poems, which look like graphic objects on the page, strike the eye of the reader even before (s)he starts reading the poem. Neither the displacement of words nor the play with words weaken the intensity or the ‘poetic’ tendency of the writing. The form not only resembles the objects discussed in the poem but enhances the meaning encoded by the poet. For instance, the poem “Women” resembles the outline of a woman’s body. It also resembles a moving platform, which puts forth the idea that women have always served the likes and dislikes of patriarchy and have never been given the space to assert their own opinions.

SWENSON SAYS

the identity or significance of what’s inside (a poem) may be camouflaged by the dimensions and shape of its ‘box’. For the perceptive reader, however, the joys of revealed meaning can be intense and personal. The poems in *Iconographs*, with their space patterns or other graphic emphasis, signal that they are to be seen, as well as read and heard. (*Iconographs* i)

Many of the poems in *Iconographs* are broken in between with ‘fractures’ and ‘fissures’ and this challenges the readers’ traditional conception of poetic lines and form. Disorder and randomness characterize the poems. If one margin of a poem forms a straight line or a simple curve, another is ragged. If sentences are simple, the lines break in between unexpectedly. Irregular rhyme schemes and metrical patterns characterize these poems.

May Swenson’s experimentation with form has resulted in a novel-poem in this collection *Iconographs*, which runs to four pages is a visual retreat. Shape poems of Swenson take a great delight in discovering the shapes of objects from the natural world.

“WOMEN”

To fully comprehend the implications of May Swenson’s shape poem, “Women”, one would do well to bear in mind some of the observations made by Kate Millet in her classic work, *Sexual Politics*. Millet talks about the abuse of women under patriarchy where every “power within the society... is entirely in male hands” (*Sexual Politics* 1969). Patriarchy, from her point of view, symbolizes universal oppression of women by men.

Adrienne Rich made a similar observation:

Whatever my status or situation, my derived economic class or my sexual preference, I live under the power of my fathers, and I have access only to so much of privilege or influence as the patriarchy is willing to accede to me, and only so for long as I will pay the price for male approval. (*Of Woman Born: Motherhood as Experience and Institution* 1976)

How is it possible to understand the nature of oppression women experience in a world in which women have education, access to financial resources and extensive civil and public rights? Kate Millet finds the answer in psychological conditioning of certain cultural codes. Women are conditioned into embracing a secondary status by a process of sex-role stereotyping. From early childhood, women are trained to accept a system, which divides a society in male and female spheres with appropriate roles for each, and which allocates public power exclusively to the male sphere. *Sexual Politics* talks about the concept of a ‘core gender identity’. Gender represents expectations, attributes and behaviour that are culturally and socially shaped. Thus, clusters of attributes are assigned to women in society which were considered to be ‘normal feminine’ behaviour. Some attitudes and activities were considered ‘normal’ to women. Millet demonstrated that for female, ‘normal’ meant passive, while for the male, it meant active. Men ‘have’ instrumental traits; they were tenacious, aggressive, curious, ambitious, playful, responsible, original and competitive. Women ‘have’ expressive traits; they were affectionate, obedient, responsive to sympathy and approval, cheerful, kind and friendly. All these expressive roles dictated conformity and obedience while men occupied the instrumental role of rationality and power.

Kate Millet also postulated that the oppression of women rested upon the establishment of the roles in what she called ‘sexual politics’. The term politics, as defined by political scientists, suggests the power held by people in public offices to influence others. Kate Millet has incorporated this notion of political power to define the relationship between men and women in a society. Swenson’s poem “Women” is a verbal-visual illustration of Millet’s this personal-political relationship between women and men.

The shape of the poem “Women” visually resembles the outline of the physical appearance of a woman. The shape given by the poet also resembles a moving platform and the to-and-fro motion of a wooden toy-horse. The shape enhances the significance of the poem’s theme – women must be ‘moving platforms’ accommodating to themselves to whims and fancies of mainstream patriarchal conventions:

women should be pedestals moving to the motions of men. (*Iconographs* 1970)

Women are expected to blur their identity and not to have likes and dislikes of their own. They should make themselves flexible to the changing attitudes of men and keep changing to fit-in to the patriarchal idea of a ‘perfect woman’. This idea is reflected by the moving platform visually represented in the poem.

The body of the woman represented in the poem’s form echoes the idea that women are generally seen only in terms of their bodies. She is a ‘wooden toy’ who is expected to be devoid of any personal feeling or emotion. Patriarchy ‘mounts’ on this toy and joyfully ‘commands’ while women play a passive role even in the most liberated cultural set-ups.

“I Look at my Hand”

This poem, “I Look at my Hand” appears in the shape of a hand. The poet keeps her hand in a hollow shape and is meditating on its physical features. Swenson is neither self-absorbed or attempts to paint a self-portrait in this poem. But her intention is to trace the marks of her inheritance, on her body, from her parents. The poet’s

careful observation, which is usually towards the objects around her in the natural world, is diverted to herself in this poem:

I look at my hand and see it is also his and hers; the pads of the fingers his. (*Iconographs* 1970)

Swenson realizes the traces of her parents present in her. The “pads of her fingers” resemble her father’s and “the wrists and knuckles” her mother’s. She is a repository of the features of her parents who created her. Even after their death, her parents live through the poet. From the distinct features inherited from her parents, the poet would be able to give rise to future generations and keep up the legacy, “that what can make no replica” (*Iconographs* 1970). There is a strong assertion of individuality and family pride in this poem. Every human being is a distinct product of his/her parents and cannot be cloned.

The shape of the hand given to the form of the poem helps the reader to trace the figurative meaning in the poem. The ‘offspring’ which Swenson mentions in her poem does not just imply the children she would raise. The ‘offspring’ also refers to the work of art – a unique creation – created by an artist which cannot be replicated by any other. Hence, the significance of the hand-shape as it is the hand that is responsible for an artistic masterpiece. The hand of an artist is symbolic of his/her artistic intelligence. From the inheritance of mental and physical genetic material from her ancestors, Swenson asserts that she will be able to produce a work of art that is creative and that which cannot be plagiarized. The hand-shape of the poem conveys a strong assertion of Swenson’s pride over her skill as a writer. Moreover, just as the hand cannot be replicated, the work of every writer’s hands – the artistic masterpiece – can never be replicated, as each writer has a style of one’s own that has been naturally inherited by him/her.

May Swenson’s poetry has incredible sweep and range, both in terms of theme and poetic craft. Nature, love, death and art – staple themes of all poets – get a distinct rendering in the poems of Swenson in a unique ‘form’ that becomes a metaphor. Swenson’s asset also lies in providing fresh perspectives to experiences. Wordsworth dealt with the mystical and spiritual influence of nature. He found in nature a source of tranquil restoration of his spirits. But in Swenson, there is no such glorification or romanticizing of nature and Nature has no spiritual significance. Nature is what Swenson sees around her - without coded meanings from a past tradition – which she depicts with exactness in her poems. Love, in her poems, is not love of Donne between two souls, but the physical commitment of two earthly creatures.

Most of the modernist poets who experimented with form did not follow any traditional notions of poetry, but their poems remained straight lines on the page. But Swenson sculpted the lines of her poems on the page. Being near sighted, she was particular to see objects with clarity and this added to the visual quality of her writing. Added to this, is an ear acutely susceptible to the changing inflections of sounds and rhythms of words. Thus a clear image and musical note emanate from her poems. Swenson’s is poetry of ‘eyes and ears’. She is a poet par excellence of sights and sounds, and it would be apt to conclude by elucidating this with an examples from her poem “Colours Without Objects”:

Colours without objects – colours alone –

wriggle in the tray of my eye,

incubated under the greater flat lamp

of the sun:

bodiless blue, little razor-streak,

yellow melting like a firework petal.... (Nature: Poems Old and New 1994)

Even a picture post card cannot capture the lights of the sun’s rays more effectively. Even a description of a snake’s movement is done with subtle music in her poem, “A Snake”:

Mud-and-silver licked, his length – a

single spastic muscle –

slid over stones and twigs to a snuggle

of roots, and hid. (Nature: Poems Old and New 1994)

With no baton in her hand, Swenson can create a symphony of sounds and rhythms.

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INTRODUCTION

Marketing is a customer oriented process involving the creation, communication, and delivery of value even as it conflicts to build and retain lifetime customer loyalty. There are diverse standard definitions of marketing. While the words used may be different, it is conspicuous that all marketing activity is about the customer, focused on acquiring them and keeping them. Marketing is a business function and set of processes involved in conceiving, delivering and communicating value to customers, followed by managing customer relationships, resulting in a bilateral benefit for the business and its stakeholders. Marketing is also the science of decided target markets via market comparison and analysis, with extensive knowledge of buying performance, target to provide the best customer value. However, marketing is successful only when an institution's mission, vision, burden, and ability to advantage technology align with and complement each other, and the business as a whole. Although marketing explores as an indicator of a firm's success, it is a matter of perspective.

Marketing is generally label as a way of communication between a business and likely customers, in the purpose of presenting and benefit the values of a certain product or service. The main ambition of this communication is to sell. It is a complex discipline that affects a lot of tasks which will ensure that the communication leads towards this target. Some of the tasks include a certain target audience, attend an analysis of the market and consumer behavior, customer relationship, etc. Marketing as regulation has been evolving and new practices are constantly being achieved to keep up with the changes in the market, innovation with the technology, as well as with the changes in the society.

OBJECTIVES OF THE STUDY

To study the concept E-Marketing.

To study the Importance of E-Marketing.

To study the Need of E-Marketing.

To study the Advantages & Disadvantages of E-Marketing.

METHODOLOGY

The present study is based on the secondary data collected from the variety of séances such of books, brochures, published a report, websites, etc. a humble attempt will be made to analyze the data in order to meet the objective of the study.

TO STUDY THE CONCEPT E-MARKETING

E-marketing is the practice of marketing a product or service using the Internet. E-marketing not only adds marketing on the Internet but also includes marketing done via e-mail and wireless publishing. It uses a range of technologies to help attach businesses to their customers. E-marketing is an action of planning and executing the conception, distribution, advancement, and pricing of products and services in a computerized, networked climate, such as the Internet and the World Wide Web, to simplify exchanges and satisfy customer demands. It has two distinct improvements over traditional marketing. E-marketing provides customers with more accessibility and more competitive prices, and it enables businesses to lower operational costs. As businesses overture e-marketing and online shopping, customers can get market knowledge from their computers or cell phones and buy goods or find services without leaving home twenty-four hours a day and seven days a week (24/7). They can read ads on the Web or from e-mail, get e-coupons, view pictures of goods, analyze prices, and make purchases with a few clicks of their mouse, saving the time and money it authorizes take to shop in person at a brick-and-mortar store. At the same time, e-businesses can decrees costs in circulation channels and physical storage space and thus pass the savings on to customers.

TO STUDY THE IMPORTANCE OF E-MARKETING.**1. TARGETING**

Most every company in business today will have some form of a customer database, whether remotely managed/outsourced or held in-house. The basic to any crusade you run is relevancy. beyond correct direction, you will receive little feedback and as a result, little ROI. division your database details, group appropriately to your product and service, whether it's something simple as geographical location or based on their previous

purchase history. conduct the correct market will minimize the risk of all future e-communication and interest in your brand hitting the irreparable oblivion of 'the junk mail' box.

2. PERMISSIONS AND PRIVACY

It is vital to always ensure you have permission to email – without it, you are essentially invading your customers' privacy, causing indelible damage to your companies image giving off a 'spams' and untrustworthy vibe. Don't cut corners on your e-marketing. Build up contacts organically from existing data held and maximize the use of 'Opt-in' Forms on your website. Similarly, with an abundance of scams and virus' hitting inbox's daily, it is vital that you have your information is covered. Customers need to feel safe in clicking your links and know their data and details aren't passed to 3rd parties at the drop of a hat.

3. CONTENT

First things first – provide your Subject Line is advisable. This can make or break the best of marketing strategies. Make sure it's punchy, informative, and a reflection of the contents entirety. Engage your market with the dangling of the imaginary carrot, luring them in to see what else you have to say. challenge yourself – what is it you want to achieve with your campaign? What are you offering? Discount codes? Unique Content? Vouchers? Be light with what decision you want to see, and have clear hope in mind.

4. GET SOCIAL

Despite Social Media is a great driving force to your site and a fantastic tool for increasing readership and subscribers, 57% of marketers don't integrate social media and email strategies Always include the basics, Facebook 'like' buttons, links to your Twitter page and feed, embedded YouTube content. Think outside the box and get people involved. The colossal complaint met by large scale marketing campaigns is the failure to respond or comment. Social Media canvas your bases and immediately gives the power to the consumer and the ability to interact.

5. TRACKING

Make assured you don't lack input and interest AFTER your campaign. How many emails were opened? How many bounced back? How many people actually noticed? Without analyzing and evaluating your results, how can you tell its success? Use unique links and content which is easily tractable from your Analytics Tools, and where possible, unique telephone numbers for tracking success and conversion. appropriating the 'bigger picture' will establish your future success as an email marketer, compiling data for future use and efficiency and most importantly, developing your overall profit and ROI.

TO STUDY THE NEED OF E-MARKETING

1. BRAND-CONTROLLED PRESS

The websites, Facebook pages, and other online assets are purchased by you. Because of this, you're better positioned to leverage the benefits of your products and services than ever before. The "press" you publish is usually in a press release format and pushed through an online agency. In addition, you're more than able to post updates, discounts, and major announcements through social media.

2. CUSTOMER INTERACTION

This is a considerable one for Web-based companies, not to mention businesses with little customer interaction. for social media, you're able to challenge your customers and applicant what they think about certain products, pricing, and amend. It is much more powerful for a customer to acknowledge to a Facebook commentary than send in a survey form, after all.

3. COMPETITION

The "If your adversary is doing it, you should, too" idea administer to social media and online marketing more than anything. In fact, the contemporary customer is more acceptable to look up a business on social media or Google. If you don't have the applicable online capital, the odds of them finding you is much, much lower. The trick, of course, is to launch campaigns that outdo your competition and work in favor of your brand.

4. ROI

The arrival-on-investment for fulfilled and social media marketing is improbable. For a few hundred bucks a month you can reach thousands of customers on community media, allocution with industry leaders through blogs and LinkedIn, and build up a stronger market base. Better yet, online marketing is easy to monitor. This grant you to see just how active each of your online assets is.

5. OPPORTUNITIES

Most businesses use a consolidation of Facebook, Twitter, LinkedIn, Google+, blogging, websites, and press outlets to advertise on the Internet. These online assets give an in-house or outsourced marketing team much more to work with than conventional billboard and news advertising.

6. TARGETING

The regional businesses with strong attention on online marketing are able to target definitive markets and customers. With Facebook, for detail, you can benefit your page to convinced cities and enumeration. This is another logic content marketing has such a long ROI for curtailed local businesses.

7. BRANDING

Branding, of course, is the big one. Businesses that institute online campaigns are capable of arranging their brands higher up on search engines, appear more professional to customers and reach out to new markets while building a stronger brand.

TO STUDY THE ADVANTAGES & DISADVANTAGES OF E-MARKETING**A) ADVANTAGES****1. CONVENIENCE AND QUICK SERVICE**

The absurd convenience of marketing online is one of the biggest convenience of internet marketing. The internet has acutely easy convenience with consumers using the internet and reaching markets anyplace in the world. Because of this, acquiring goods from beyond borders now reduces the cost of shipping. For importers, this is a huge advantage as it means they can order online right from the amenity of their home. In addition, you can calmly track sales items online as they make their way into delivery.

2. LOW COST FOR PROCEDURE AND A WIDER REACH

One of the compelling advantages of online marketing for businesses is its low performing cost. You can advertise at a cheaper rate with internet marketing than with classical methods of advertisement akin as ads in newspapers, on television and on the radio. additional, these advertisements have a wider reach, owing to the expanded use of devices by most consumers. In fact, according to some figures shared by Google, at the 2016 Canadian Double click administration Summit, every two out of three Canadians use two or more devices on a regular basis. And to add to this, around 69% of them use various devices while making just one purchase.

3. MEASURE AND TRACK RESULTS

A condition of internet marketing that is rarely available with traditional marketing is the capability to allotment and track results. With online marketing, your business can appropriate various tools, such as Google partition, Hoot suite, Doppler, and Crazy Egg, for tracking results of your advertising crusade. Using these tools, not only can you measure and track the effectiveness of your online marketing campaigns, but also clarify its progress in detailed artwork.

4. DEMOGRAPHIC TARGETING

Have you ever disbelieve why more than 90% of users who visit a website do not necessarily get converted into customers? Mass marketing is the answer to this. an analysis reveals that custom-made, critical advertisements get you eight times more the returns than differently. Therefore, analytical targeting plays a key role in the achievement of your business. Marketing your products and services online gives you the ability to target your audience based on demography. This allows you to apply your efforts on the congregation that you truly want to offer your products or services to. In alternative words, it gives you the capability to target specific customers you think are likely to purchase your product or hire your services.

5. GLOBAL MARKETING

The skill to market your products and services beyond countries is one of the biggest advantages of global marketing for business. in several months of following advancing SEO techniques, you can expect a huge number of hits your website, secure millions of viewers and reach congregation from across the world. This is a correct example to describe how with internet marketing, you can easily reach beyond your geography to offer your products or services to customers worldwide. Wherever your target audiences are, you can reach them 24/7 and from any country all over the world.

6. ABILITY TO MULTITASK

One of the core welfare of online marketing is its ability to handle millions of customers at the same time. This is also the logic of why it is decisive for you to advance your website to make it device-friendly. It must be built to ensure that is available through any device, be it a notebook, smartphone, or a laptop. As long as a website's framework is efficient, numerous transactions can take place seamlessly and together. This means that even with a large number of transactions taking place, your website is capable of contingent upon suitable service to every customer who makes a purchase online.

7. 24/7 MARKETING

Internet marketing reduces charge and race around the clock. That process that your marketing crusade race for 24 hours a day, 7 days a week. correlated to conventional marketing, internet marketing does not have any limitations in terms of opening or closing hours. At the same time, you would not have to worry about extra pay for your staff. In addition to this, you need not bring in any extra efforts to adjust any local or international time difference that may affect the reachability or availability of your attempt or online campaigns.

8. AUTOMATED, TECH-SAVVY MARKETING

Internet marketing is that marketing this idea is easy with one-mouse-click computerization. Compared to traditional offline marketing where marketers delegate various tasks to the best hands and capability, internet marketing takes advantage of a more tech-savvy method. For instance, you can use Customer.io to brutalize your emails. besides, you can check out Ad Roll for contentious targeting your existing customer base. Oracle Époque is yet another tool that is highly effective for running automated yet demonstrate marketing campaigns.

9. DATA COLLECTION FOR PERSONALIZATION

The agreement through the internet allows you to collect data. when a customer purchases a product through a company's website, their data is captured. There are various ways that you can collect customer data including customer profiles or through their performance while on your website. Another way of collecting customer data is the use of an internet appliance or with any tracking software. The information collected customarily includes age, gender, location, how they came to your site, what sites they visited after they left, consider products and the pages call on your site.

10. DIVERSIFIED MARKETING AND ADVERTISING

When focus your audience, diversity plays an important aspect in your marketing and advertising campaigns. heterogeneity means that you can use a variety of tactics and design in order to reach your anticipation. With online marketing, diversification becomes a lot easier. At the same time, it is possible for you to run varying marketing techniques simultaneously to better implement your marketing campaign.

B) DISADVANTAGES:**1. SPEED**

One of the benefits of electronic mail marketing strategy for small business is that the time it takes to create an e-mail newsletter is a lot shorter than creating campaigns for traditional media. You can take advantage of already made e-mail templates to speed up the process or make your own and reuse it.

2. LOW COST

Sending out e-mail newsletters is very cost effective. There is a lot of free choice such as Mail chimp that a lot of association take advantage of. There are tons of them, you just have to look and find the best e-marketing tool for yourself.

3. EASE

Learning how to send and create an e-marketing campaign is fairly straight forward and there isn't a huge learning curve for your email marketing strategy for small business.

4. PERSONALIZATION

One of the prosperity of email marketing terrace is that you can start to separate your customers and creating different lists. This allows you to send different messages to different customers, e.g. gift ideas for him to your female customers and gift plan for her to your male customers. The two colossal conveniences of email marketing are that it's scalable and mobile-effective, two advantages that many other marketing channels don't offer. over email, you can target public of any size, pasturing from one to one million, and do so adequately.

5. IMMEDIATE RESPONSE

Emails have consistently received a high click-through rate than other mediums and also a higher alteration rate. This allows marketers to accept a high ROI from their email marketing approach for small business and their achievement.

6. TRACKING

Using e-marketing platforms makes the whole campaign very tractable from how many emails were opened, through to each individual link click, through to who opened your email and who didn't. So, email marketing apprehend is very easy and intelligent.

7. VIRAL

Emails make it accessible for people to press ahead and send it to their friends on their contact list. This allows your message to advance virally, which means that one of the assistance of an email marketing strategy for small business is also its big coverage convenience.

8. OPT-IN

The fact that the people on your database have opted in according to the spam act to receive your emails makes them more open to your messages.

9. TESTING

Just like many other online marketing methods the speed to deployment and the flexibility of email marketing strategy for small business allows you to constantly test strategies and content with your customers. By splitting your database into 2 different lists and sending each a different message you can study the open and click-through rates to gauge which message resonated with your customers more. This is also called A/B testing.

10. INTEGRATION

You can assimilate email marketing planning for small business very readily with your other marketing efforts by sending a similar message to your other marketing material with a slightly different call to action or benefit. enormous ways to do this is to put on your website an action where, by endorse to you, they can receive a premium off the product. This message can then be run via banner ads as well.

CONCLUSION

Marketing is the most appealing of all business athletics. It is the heartbeat of every fortunate business. It is frequently changing in comeback to the explosion of information, the extension of automation, and the combativeness of championship, at all levels and everywhere. All business strategy is a marketing strategy. Your ability to think clearly and well about the very best marketing strategies, and to continually change and upgrade your activities, is the key to the future of your business. this essay has certainly shown that e-marketing brunt upon businesses in a number of important action. When used appropriately, e-marketing campaigns and approach have the hidden to reach customers in an increased and low-cost manner and can provide an advance for a wide range of products and services.

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CUSTOMER RELATIONSHIP MANAGEMENT WITH SPECIAL REFERENCE TO HDFC BANK**Prof Subhashini Naikar¹ and Prof Madhavi Nighoskar²**¹Vice Principal SFC, Prahladrai Dalmia Lions College of Commerce & Economics²Vice Principal Degree, Prahladrai Dalmia Lions College of Commerce & Economics**ABSTRACT**

Private banking is a concept which is fast emerging in the world of banking where changes have become a necessity in order for banks to survive in this competitive environment with regards to not only from the public and private sector banks but also from the foreign banks.

Customer Relationship Management or CRM is a company-wide business strategy designed to reduce costs and increase profitability by solidifying customer loyalty. It's a strategy used to learn more about customers' needs and behaviours in order to develop stronger relationships with them. After all, good customer relationships are at the heart of business success.

Successful banks all over the world have invested considerably in customer relationship management technologies, which in turn would increase banks' profits considerably on one hand and improve the level of their customers in doing business with them on the other hand. The intense competition which banks have come to face, both as consequence of growth of non-banking financial institutions as well as securitization has created the fear of high risk and has increased the attention towards Customer Relationship Management.

CRM IN HDFC BANK

HDFC Bank Uses CRM to Achieve its "One Bank" Vision Boosting Profit and Customer Satisfaction.

Based in India, HDFC Bank is the largest private universal bank by market capitalization, with more than 25 million customers, an extensive distribution network of 2544 branches spread across 1399 cities and more than 55,000 employees. To maintain its leadership, HDFC Bank used CRMnext to establish a single platform for execution of its strategy across products, departments and channels. The result, over FY2008- 2011, bank's net profit has grown from USD 318 million to USD 1033 million at a consistent rate of 30% quarter-on-quarter for the last 3 years. During this period the banks customer base has grown by 113%, while the loyalty index has grown from 38 to 62 as opposed to industry average of 54.

HDFC BANK HELPS TO UNDERSTAND HOW THEIR FINANCIAL PRODUCTS AND SERVICES WORK BY

- HDFC Bank provides information about them in any one or more of the following languages: Hindi, English or the appropriate local language.
- Ensuring that their advertising and promotional literature is clear and not misleading.
- Ensuring that customers are given clear information about their products and services, the terms and conditions and the interest rates/service charges, which apply to them.
- HDFC Bank provides the customers information on what are the benefits for them through the bank.
- How the customers can avail of the benefits, and whom they can contact for addressing the queries.
- Advise the customers about what documentation they need.

BEFORE WE BECOME A CUSTOMER HDFC BANK WILL

- Give clear information explaining the key features of the services and products which we are interested in.
- Give information on any type of product and services which are offered by the bank and also suits the customer.
- Tell us if the offer products and services in more than one and guide about how to use them regularly.
- Tell us what information they need from us to prove identity and the address.

DEALS QUICKLY AND EFFECTIVELY WITH THE CUSTOMERS QUERIES AND COMPLAINTS BY

- Offering channels for the customers to route their queries.
- Listening to them patiently.
- Accepting their mistakes, if any.

- Correcting mistakes/implementing changes to address the queries raised.
- Communicating their responses to the customers promptly.
- Telling the customers how to take the complaint forward if they are not satisfied with the response.

CRITICAL SUCCESS FACTORS

HDFC Bank believes several steps together led to its program success, including:

Top management vision and support -

- Understanding & communicating the vision of the program clearly.
- Driving it as a transformation rather than a technology project.
- Ensuring adequate resource allocation in term of time and money.

Implementation methodology -

- Creating a 3 year roadmap to achieve the full potential of the vision.
- Creating an internal CRM excellence team.
- Ensuring adequate multi-wave iterations for process unification.
- Taking quick decision during departmental conflicts.
- Understanding that user adoption is driven by value & not technology.

Respecting technology complexities -

- Creating reliable integrations because they must tested day-on-day.
- Ensuring right strategies to work with LOB system that are not open.
- Understanding scalability requirements is the key to decision making.
- Understanding the impact of reports and isolating the work load.

Ownership experience -

- Training production teams to own such a high impact CRM.
- Ensuring user training is part of the HR induction program.
- Ensuring adequate user feedback and improvement cycles.
- Using strong production change management practices to deliver always on availability.

Selecting the right Partners -

- Understanding that such transformation need practice specialists.
- Selecting a partner who can add value to the vision.
- Listening to the partner especially when the advice is counter intuitive.

CRM SOFTWARE USED BY HDFC BANK

HDFC Bank uses CRM Next as CRM software while the cash management is done through using software from a Pune based company i.e. Cash Tech. Moreover the depository system of the bank runs on software provided by the Mumbai - based Kalptaru. Some of the other IT enabled initiatives are:

- 1) Nucleus Software for loans.
- 2) Mainframe - class UNIX machine (the E10000 system) from Sun Microsystems for its banking needs.
- 3) iFlex's Micro banker and Finware as a software for core banking operations.
- 4) Internet banking software for internet based channel.

CRM INITIATIVES BY THE BANK

A customer is an asset if he/she is loyal to the organisation, HDFC bank has got majority of these assets in its customer base as 76% of its existing customers are found out to be loyal. This is attained due to holistic CRM approach adopted by the bank. As the bank's director himself mentions in his annual; report that "the bank's

data warehouse, customer relationship management and analytics solutions have helped it target its existing and potential customers in a cost effective manner and offer them products appropriate to their Profile and needs.” The Bank realises the value of CRM and IT initiatives offered to the customers for becoming more loyal to the bank. The frauds and credit losses are also lowered by imbibing this approach of CRM.

SOME OF THE MAJOR INITIATIVES TAKEN BY THE BANK FOR STRENGTHENING ITS CUSTOMER EXPERIENCE ARE

1. The bank provides Highly IT enabled services in the form of Internet banking. It has been discovered that 60% of the registered bank’s customers transact through online banking.
2. Mobile banking and ATM are also providing multi-channel service delivery system to the customers which are discovered to be 80% initiated by the customers which are serviced through non-branch channels.
3. Service quality projects are carried out by the bank using lean Sigma Tool-kit, 5S and other business excellence initiatives are undertaken by the bank just to deliver customer delight”. The service quality objectives and the business objectives are merged so that the customer delight and improved profitability can be obtained.
4. Customer service committee which monitors quality of services, formulates comprehensive deposit policy (in terms of issues arising due to death of a depositor for his account operations), gets approval for the products, and surveys customer satisfaction annually and triennially.
5. The bank also offers the customer helpdesk in case of any query, grievance, or direct contact to the bank, through call centres, in branch counters, email address, and through bank’s website.

RESEARCH METHODOLOGY

Research method to achieve the objective of the study is a way to organize. Research methodology is the specific procedures or techniques used to identify, select, process, and analyse information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study’s overall validity and reliability.

RESEARCH AND SAMPLE DESIGN

- Research Type: Exploratory research.
- Nature of Research: Quantitative Research.
- Type of Questions: Open Ended and Closed Ended.
- Type of Sampling: Convenience Sampling Method.
- Research Environment: Field setting.
- Sample Extent: HDFC Bank Nallasopara (East) Branch.
- Sample Size: 100 customers.
- Sample Element: HDFC Bank customers.

SOURCES OF DATA COLLECTION

PRIMARY DATA

Primary data will be the data that you gather particularly with the end goal of your research venture. Primary data is otherwise called raw information; the information gathered from the first source in a controlled or an uncontrolled situation.

The source of primary data was collected through:

- (a) Questionnaires from bank manager and existing customers of HDFC Bank.
- (b) Inventory Records
- (c) Statement of profit and loss.

SECONDARY DATA

Secondary data are the data collected by a party not related to the research study but collected these data for some other purpose and at different time in the past. If the researcher uses these data then these become secondary data for the current users.

The source of secondary data was collected through:

- (a) Company database.
- (b) Reserve Bank of India (RBI) Website.
- (c) Books & Periodicals.

OBJECTIVES OF THE STUDY

- 1. Study of products and services offered to the customers.
- 2. Ascertaining the behaviour and perception of the existing customers towards products/services in banking.
- 3. Study the value of existing customers and reduce cost associated with servicing them and ways to increase the overall efficiency of bank performance.
- 4. Identifying the most and least profitable customer.
- 5. To identify and study the various ways of ensuring customer satisfaction adopted by HDFC Bank.
- 6. Receiving the customer feedback that leads to new and improved product and services.
- 7. To access the perception of the Bank Employees towards the implementation of Customer Relationship Management in the Bank.
- 8. To access the perception and satisfaction of the customers with the Bank.

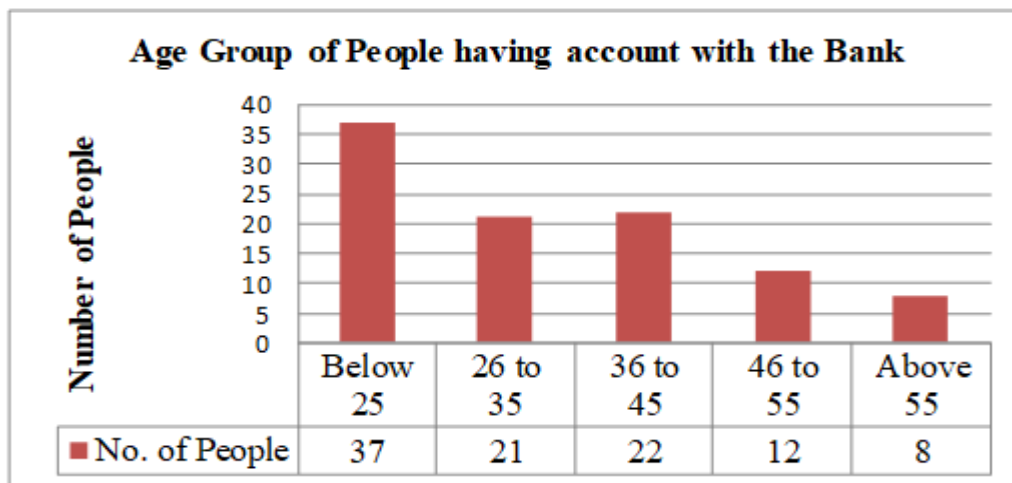
LIMITATIONS OF THE STUDY

During the project following limitations were known:

- 1. The area was large and it was not possible to deal with each and every customer.
- 2. Time was the major constraint as I have less days and the area is very vast. Even though I have put up the best of my efforts to cover all the areas given to me.
- 3. Many of the customers were not cooperative when they were asked for their time.
- 4. As HDFC Bank is a big brand, many times the answers of the respondent may be affected by his good or bad experience about some other product.
- 5. To convince the people for a proper interviewing process is also difficult.
- 6. Compilation of data on competitor analysis was difficult due to non-availability of correct information.
- 7. The results of this study may not apply to other areas based on data collected from the city.

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

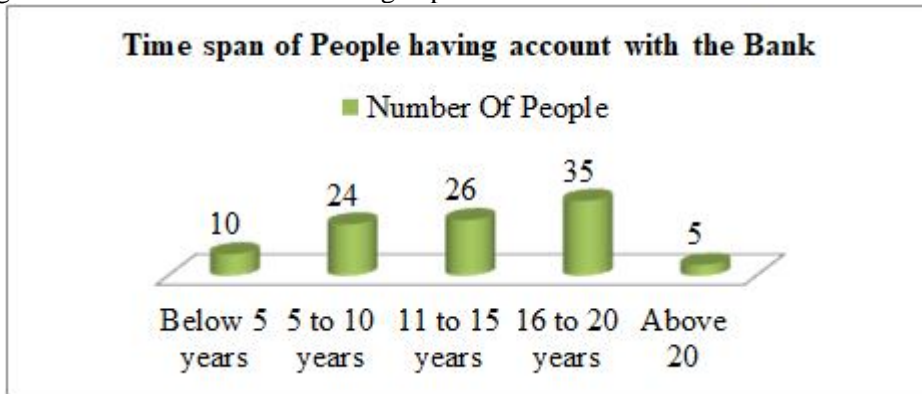
1. The following chart shows age group of people having account with the bank:



INTERPRETATION

Above graphical representation shows that the age group of people below 25 years are more directed towards the banking sector as compared to the people above the age of 55 years. This is because the young generation is nowadays more into investments through banks and also the bank has upgraded itself through CRM.

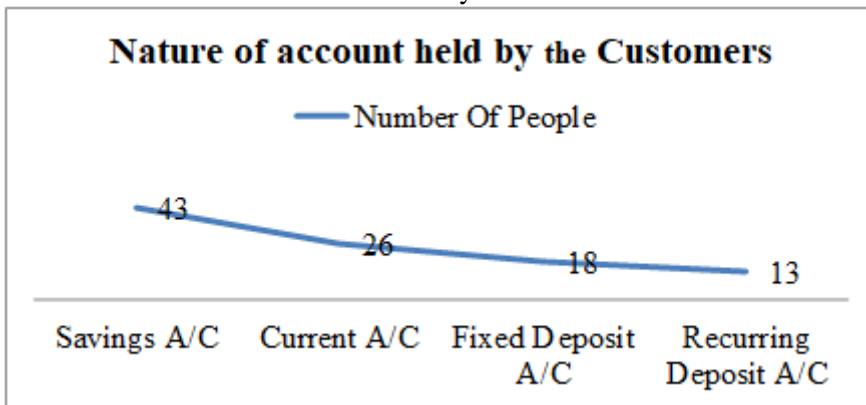
2. The following chart shows duration of banking experience of customers with the bank:



INTERPRETATION

Above graphical representation shows that more number of people have been in relationship with the bank for a longer period of time due to better practices carried out by the bank to retain its customers and increase customer loyalty.

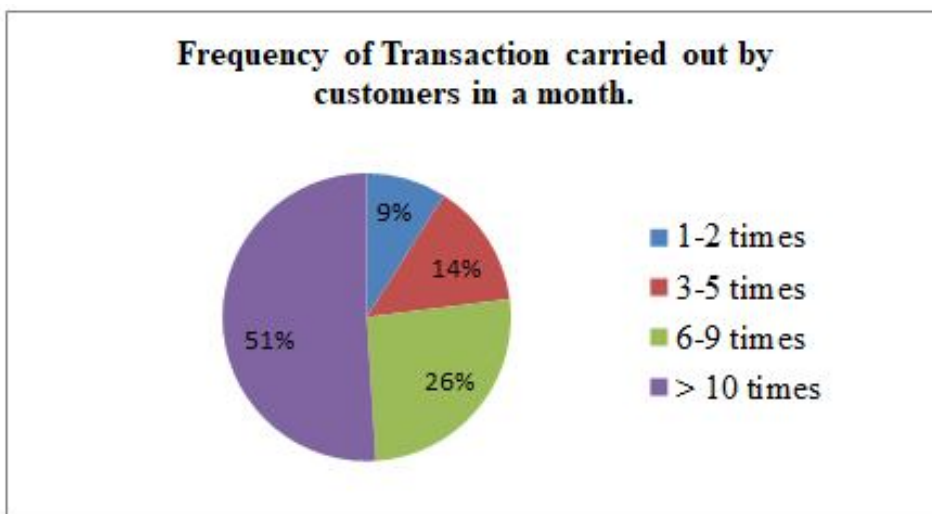
3. The following chart shows the nature of account held by the customers with the bank:



INTERPRETATION

Above graphical representation shows that most of the people hold savings account in HDFC Bank because more people opt for corporate jobs rather than businesses and savings account are specially designed for salaried people.

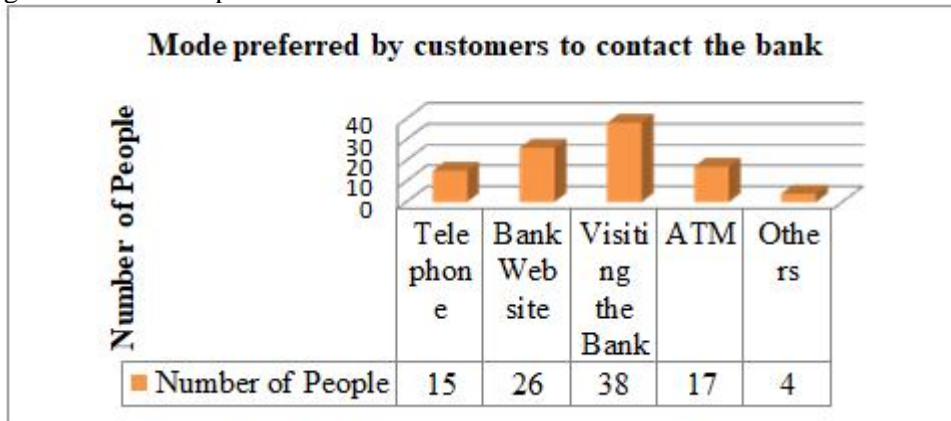
4. The following chart shows the frequency of transactions carried out the customers in the bank in a month:



INTERPRETATION

Above pie chart shows that people are more frequent in using the bank for transaction purpose i.e. 51% of the customers prefer using banking services for buying and selling goods and services as it is considered more safe and secure when compared to physical cash.

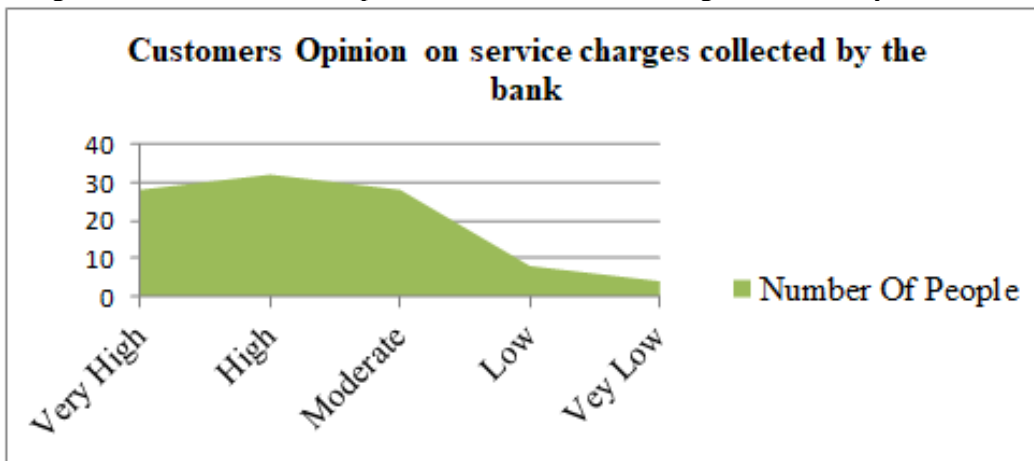
5. The following chart shows the preferred mode of customers to contact the bank:



INTERPRETATION

The above bar diagram shows that most of the customers in HDFC Bank prefer visiting the bank as they feel face to face interaction with the bank employees help them understand and operate with the bank more conveniently.

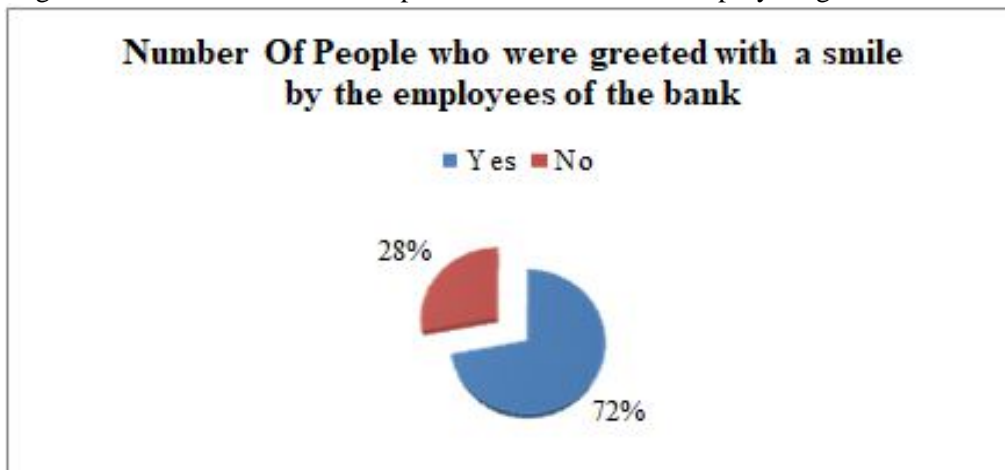
6. The following chart shows customers opinion about the service charges collected by the bank:



INTERPRETATION

As per the chart, a large number of customers believe that the service charges levied by the bank are too high as compared to the public sector banks. The bank must look into such matters and try to reduce the service charges. This would in turn help the bank increase the rate of retention of customers.

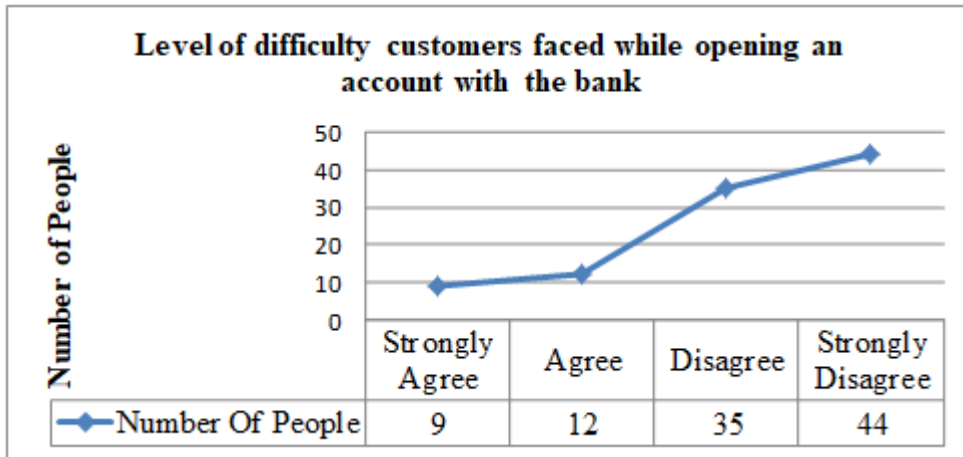
7. The following chart shows the customers experience in whether the employees greet them with a smile:



INTERPRETATION

The pie chart above depicts that 72% of the customers have experienced that they are greeted with a smile, their time is valued and all the queries have been attended as soon as possible.

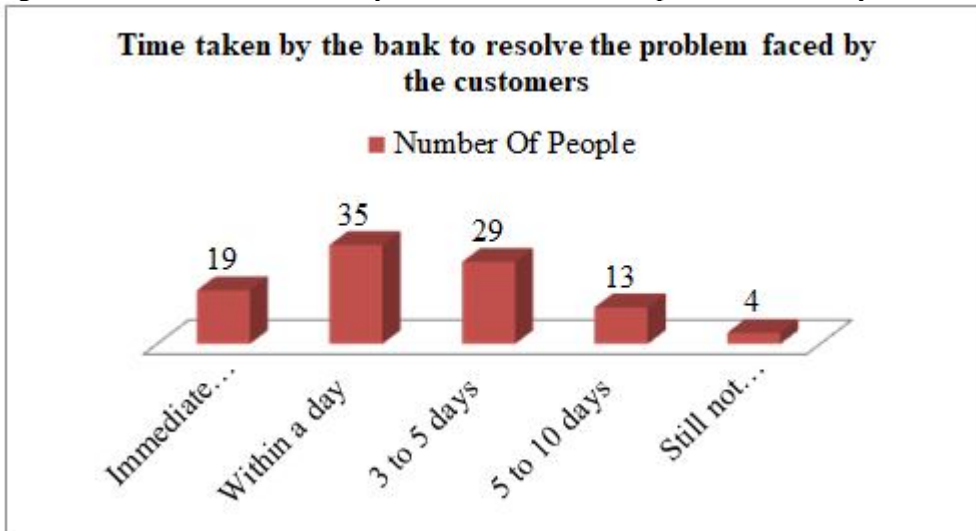
8. The following chart shows according to customers how difficult it was for them to open an account with the bank:



INTERPRETATION

The above line diagram shows that higher number of people feel that it took them less time to open an account with the bank, as limited number of documentations were required for the purpose of KYC. 44% of the people strongly disagree with the poor account opening process.

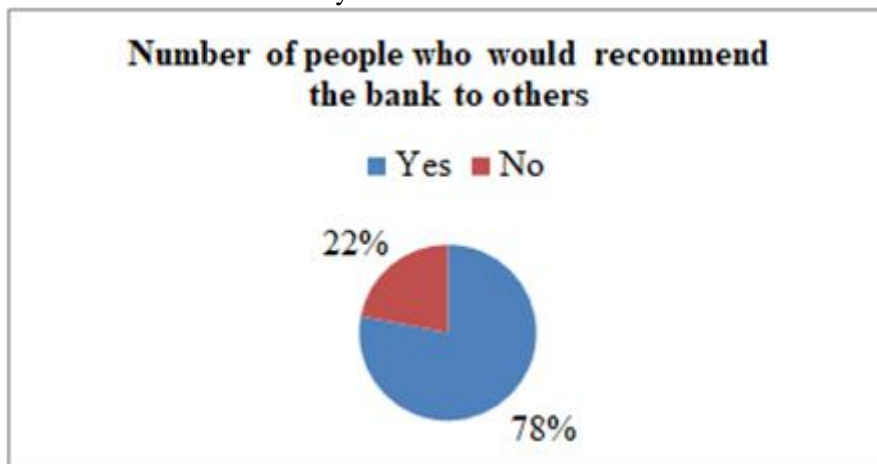
9. The following chart shows the time taken by the bank to resolve to problems faced by the customers:



INTERPRETATION

Above bar diagram shows that major customers fall in the category of the problems that were resolved within a day, as private bank such as HDFC is more customer-oriented and believe in immediate problem solving.

10. The following chart shows about how many customers would recommend the bank to others



INTERPRETATION

The above pie diagram shows that 87% of the HDFC Bank customers would recommend the bank to their friends and relatives as they trust the bank and are happy with the services provided by the bank in the course of relation with the bank. On the other hand, remaining 13% may have faced some unfortunate experiences with the bank and that is the reason why they do not consider recommending the bank to others.

FINDINGS ON THE BASIS OF CUSTOMERS DATA

As per the data collected via questionnaire prepared for both the customers and Managers one thing that is quite evident that both are fully aware about the customer relationship management. With the help of proper training, employees are able to handle the customer problems and their queries. Due to the emergency of the concepts of CRM one thing that is quite sure that they both are aware of their role. Though there are some problems but still they can be managed.

1. The study revealed that the 84% of the selected sample customers are aware of Information and Communication Technology used by the banks and others are aware but they are not using the same due to security aspects of the same.
2. The bank is providing ATM, e-banking, Telephone banking; Mobile Banking, SMS banking facilities out of which ATM and SMS banking are more popular among customers.
3. Among the four selected banks people are happy on the performance of ICICI Bank, As far as use of CRM is concerned.
4. Around 60% of the respondents are happy with the experience of CRM in banking and 71% are satisfied.
5. As per customer feedback, they have to wait a little long but that is only during weekends when there are a huge number of customers. Other than that as per the survey conducted there are hardly any problems regarding the management. As the banks have made necessary help desks for each of its services that are offered.
6. Customers share positive views concerning bank trustworthiness and accuracy of banking solutions. Therefore, it can be argued that customers trust their bank. Indeed, faith is crucial factor including CRM.
7. Bank employees are empowered to take decision that may positively affect customer satisfaction, in the absence of his superior.
8. This result has to do with the new system and technology-based process adopted by the banking sector. It has seen a revolution in the way it has been operating and rendering their service. Due to this, services have become easy and handy, in consumer banking sector.
9. It can be deduced that the Indian banking sector has not been able to value customer relationships. Therefore, the overall results provide a strong support for Indian banking sector to review its tactical strategies as far as the ability to respond to customers' expectations is concerned, provision of an excellent service at any point of contact, convenience and comfort through innovative and modern banking service.

FINDINGS ON THE BASIS OF MANAGERS INTERVIEW

During the research to understand the importance of factors some were asked to respondents:

1. Interactive management - From the responses of various respondents shows that initiative taken for customers plays vital role.
2. Customer's empowerment - The response of different respondents shows that customer empowerment is still needed.
3. Expectation of Customers - From the responses of various respondents it is clear that they are moderately dissatisfied.
4. Internet services with security - Reply by different customer's shows that though now bank provides Internet services but risk plays a vital role.
5. Bank Initiative - From various responses initiative taken by Bank for customer play very crucial role. 71% of respondents are satisfied. This indicates that Bank initiative is very important aspect and demands attention by DENA Bank. As term and conditions are clear and all follow the same. Then also an undue emphasis is given on rules & procedures of Bank by staff.
6. Various Services - Reply shows that services provided by bank plays important role by retaining customers by providing diversified and personalized services to the customers.

7. Online service - According to the manager respondents are satisfied with the e-mail facility, online customer services, A/C information and online bulletin board, VOIP, online order within 3-clicks and information to the first time eservice users.
8. Trained Staff - In the view of the manager, the young employees in HDFC Banks are well trained with comparison of other banks but customers still found bank staff is experience to attend problematic situation with their efforts and experience.
9. Competition in Banking Sector - From the responses of respondents it is clear that banks are ready for competition, out of total respondents, 75% replies as YES. The manager of HDFC Bank felt that customers' expectations are higher. So, they require 100% accuracy to have long relationship with them.
10. Work flow - Young staff of the bank are faster and aggressive in the comparison to the aged employees in bank they are little slow. In Competitive Technological advance era in HDFC Banks are replacing their mind set of employees which adds to fare customer practices in and CRM utilization.

CONCLUSION

This study shows a direct relationship between bank customers' sensibility and satisfaction. Banks are accepted that CRM is the magic stick, which helps banking sector to build closer and profitable relationships with customer. To achieve the customer relationships, success and the survival of the new paradigm, banks has to make CRM 17 approaches for recognizing a "share of customer" as a basis of strategy in their system. This will divert the bank strategy from developing product base strategy to focus on delivering to customers by having a brief and exact ways of delivering the services, through effective CRM solutions.

SKILL INDIA: MISSION TOWARDS UNEMPLOYMENT'S TO EMPLOYMENT'S**Dr. Prakash Ratanlal Rodiya**

Assistant Professor, Department of Commerce, Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

ABSTRACT

India is one of the youngest nations in the globe with more than 54% of the total populace below 25 years of age. India's personnel are the second largest in the globe after China's. While China's demographic dividend is probable to start contraction off by 2015, India will carry on to enjoy it till 2040. However, India's officially skilled personnel is about 2% - which is dreadfully low compared to China (47%), Japan (80%) or South Korea (96%). To influence our demographic dividend more considerably and significantly, the Government launched the "Skill India" operation along with "Make in India". In this brief, we glance at the Skill Development ecological unit in India - the necessitate for Skill Development, initiative taken by the Government and schemes introduced for skill government by the present rule. Livelihood opportunity are exaggerated by supply and demand side issues. On the provide side, India is failing to create sufficient job opportunities; and on the require side, professionals entering the job market are deficient in skill sets. Globalization, knowledge and struggle have intensified the requirement for highly skilled workforce in both the developing and advanced nations as it enables them to speed up the growth rate of their economy towards superior trajectory. Today all economies necessitate skilled workforce so as to gather global standards of quality, to augment their foreign trade, to bring superior technologies to their household industries and to boost their manufacturing and economic advance. This is resultant in a scenario of rising joblessness rates along with low employability. The aim of this paper is to make discussion on Skill India Mission and to give suggestions for its better implementation in the nation for the eradication of unemployment's.

Keywords: Skill, Unemployment's, Mission, Workforce

INTRODUCTION

Skills and acquaintance becomes the major driving power of socio-economic expansion and development for any nation. As it has been experimental those countries with highly skilled human capital are likely to have higher GDP. For the Indian economy to grow at 8% to 9%, with the embattled growth rate of 10% for secondary, 11% for tertiary and 4% for farming sectors, a multi-faceted and highly competent skill development system is crucial. Maharashtra is one of the leading states in India. The youth of Maharashtra state are facing lot of obstacles to get well employment opportunities due to lack of adequate skills to full fill the require of leading sectors. Hence, such a scenario necessitates skill advance for the workforce of Maharashtra state. Thus, this Minor research study will be related to discuss the data and methodological issues, depict the findings pertaining to present skill capacity, challenges and ways forward for the success of effective skill development programs all India level in general and Maharashtra State level in particular.

JOB CREATION

Between 1999-2000 and 2004-05, the number of jobs amplified by 59.9 million persons (assessment by usual status) beside an increase in labour force of 62 million. Though, the increase in employment kept pace with increase in labour force for the next 5 years, the total increase in jobs was only 1.1 million. Employ generation picked up from 2009-10, with 13.9 million people finding jobs in 3 years. However, 14.9 million people enter the job market during this period. Currently about 26 million populace enter the working age group every year with about 65% of them look for jobs.

YOUTH SKILLING

While keeping pace with employment generation is one issue, employability and productivity of those entering the labour market is another issue. As per the India Skills report 2015, only 37.22% of surveyed people were found employable - 34.26% among male and 37.88% among female. NSSO (2010) showed that only 10.1% of the labour force had received vocational training, with only 25.6% among them receiving a formal vocational training. India ranked last among 60 countries on labour output.

DEMAND FOR SKILLED PERSONNEL

CII (2009) had predictable Incremental Human Resource obligation till 2022 at 201 million, making the total obligation of accomplished work force by 2022 at 300 million. A main share of these jobs was to be additional in the manufacturing sector, with the National Manufacturing Policy (2011) targeting 100million new jobs in manufacturing by 2022. The National Skill Development Policy (2009) had set a aim of skilling 500 million people by 2022. More newly, study reports commissioned and out by Ministry of Skill Development assess an incremental human supply requirement across 24 sectors as 109.73 million by 2022.

GOVERNMENT POLICIES ON SKILL DEVELOPMENT

The Government has accepted the need for Skill Development with the 11th Five Year Plan providing a structure to address the situation. The first National Skill Development Policy was framed in 2009 and then a National Skill Development Mission was launch in 2010. The Policy was to be appraisal every five years to assess the growth and revised appropriately. The 12th Five Year Plan observe that Skill development programmes in the past have been run mainly by the government, with insufficient association with market demand. It has called for an enabling framework that would attract private asset in Vocational Training through Public-Private Partnership (PPP). The NDA Government shaped a Ministry of Skill Development & Entrepreneurship to tackle the Skill Development wants.

LITERATURE REVIEW

A Department of Skill Development and Entrepreneurship was shaped under the Ministry of Youth Affairs and Sports in July, 2014 and was then upgraded to full-fledged ministry in November 2014. The role of the Ministry involve coordinating and evolving skill development frameworks, mapping of existing skills and guarantee, industry-institute linkages among others. Human Resource and Skill obligation reports across 24 sectors were prepared which serve as abaseline for all skill growth initiatives. The Ministry works primarily through the National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), and the Directorate of Training (DT).

OBJECTIVES OF ‘SKILL INDIA’

The main goal is to create opportunity, space and scope for the development of the talents of the Indian youth and to develop more of those sectors which have by now been put under skill development for the last so many years and also to recognize new sectors for skill development. The new programme aims at providing training and skill development to 500 million youth of our country by 2020, cover each and every village. Various schemes are also proposed to achieve this aim.

- The emphasis is to skill the youths in such a way so that they get employment.
- Provides training, support and guidance for all occupations.
- More emphasis will be given on new areas like real estate, construction, transportation, textile etc.
- The training programmes would be on the lines of global level so that the youths of our country can not only meet the domestic demands but also of other countries.
- ‘Skill India’ programme would be to create a hallmark called ‘Rural India Skill’, so as to standardise the training process.
- Tailor-made, need-based programmes would be initiated for specific age groups.
- Language and communication skills, life and positive thinking skills, personality development skills etc. will be developed.
- The course methodology of ‘Skill India’ would be pioneering, which would include games, group discussions, brainstorming sessions, practical experiences, case studies etc.

Skill India won’t be just a programme but a group. Here, youth who are jobless, college and school dropouts, along with the cultured ones, from rural and urban areas, all will be given value adding. The new ministry will be the certify agency. Certificates will be issued to those who complete a particular skill or programme and this official document has to be recognized by all public and private agencies and entities, including abroad organisations. Skill India is a programme for the whole nation.

SKILL DEVELOPMENTS IN HIGHER EDUCATION

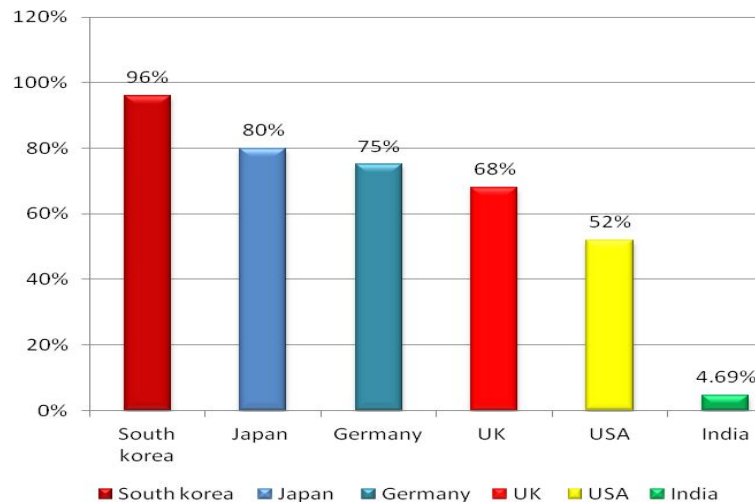
For the Indian economy to grow at 8% to 9%, with the embattled growth rate of 10% for secondary, 11% for tertiary and 4% for farming sectors, a multi-faceted and highly competent skill development system is crucial. Maharashtra is one of the leading states in India. The youth of Maharashtra state are facing lot of obstacles to get well employment opportunities due to lack of adequate skills to full fill the require of leading sectors. Hence, such a scenario necessitates skill advance for the workforce of Maharashtra state.

Selected Country wise % of work force undergone formal skill training

Sr. No.	Country	Percentage
1	South Korea	96.00%
2	Japan	80.00%

3	Germany	75.00%
4	UK	68.00%
5	USA	52.00%
6	India	04.69%

(Source: Global Education Digest, UNESCO, 2014)



(Source: Global Education Digest, UNESCO, 2014)

Skills and knowledge are driving forces of economic growth and social development for any nation. The country, however, has a big challenge in front as it is estimated that only 4.69% of the total workforce in India has undergone formal skill training as compared to 68% in UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea. It indicates the urgent require of skill based training to the Indian work force.

ADVANTAGES OF SKILL INDIA

The idea is to raise confidence, improve productivity and give direction through proper skill development. Skill development will enable the youths to get blue-collar jobs. Development of skills, at a young age, right at the school level, is very essential to channelize them for proper job opportunities. There should be a balanced growth in all the sectors and all jobs should be given equal importance. Every job aspirant would be given training in soft skills to lead a proper and decent life. Skill development would reach the rural and remote areas also. Corporate educational institutions, non-government organizations, Government, academic institutions, and society would help in the development of skills of the youths so that better results are achieved in the shortest time possible.

LIST OF STANDARDIZED COURSES OF SKILL INDIA

Entrepreneurship Development Program (EDPs)

- Electrical gadget repair
- Electronic Assembly
- Electroplating
- Fashion Designing
- Hosiery & Woollen Garments
- Essential Oil and Perfumery Products
- Food Processing
- Footwear Designing
- Forging and Casting
- Gaming with flash
- Glass Cutting & Polishing
- Heat Treatment
- Leather Products
- Lens Grinding

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- Machining
 - Microprocessor Application & Programming
 - Microsoft Certified Software Engineering
 - Mobile Repairing
 - CRR Scheme for CPSUs
 - EDP
 - Women EDP
 - Women Empowerment through Gender Equity
 - AC Refrigerator & Water Cooler Repair
 - Agricultural Water Lifting Equipment – Maintenance & Repair
 - Bakery Products
 - Biotechnology
 - Blacksmithy
 - CAD/CAM
 - Calibrations of instruments
 - Die Fitter
 - Draughtsmanship training
 - DTP
 - Motor & Transformer Rewinding
 - Motor Winding & Pump set Repair
 - Mouldings & Pattern Making
 - Multimedia
 - Mushroom Cultivation
 - Carpentry
 - Catering
 - CNC Lathe Wire cut Milling
 - Compressor Repair
 - Computer Accounting with Tally
 - Cosmetology and Beautician
 - Cyber café
 - Dairy based ESDP
 - Designing and Manufacturing of Artificial Jewellery
 - PCB Design
 - Photography and Photoshop
 - PLC Programming
 - Plumbing and Sanitary Fittings
 - Retail Management
 - Screen Printing and Hand Painting on Glass
 - Soap and Detergents
 - Sports Goods
 - Steel Fabrication
 - T.V Repairing
 - Testing of Chemicals
 - Tool and Die Making
 - Tour Operators
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- Two Wheeler Maintenance & Repair
 - Wax Candle and Chalk Crayons
 - Wireman Training
 - 2D
 - 3D
 - Adobe
 - Advance JAVA
 - Autodesk Combustion
 - CC++ and OOPs
 - Computer Hardware and Networking
 - Core JAVA
 - Digital Photography & Videography
 - Electronic Mechanic
 - Engineering Drawing with CAD
 - Finishing & Packing Supervisor
 - Fitter Fabrication
 - Fitter Maintenance General
 - Housekeeping & Hospitality
 - Interior Design
 - Landscape Design
 - Linux Administration
 - MCP and CCNA
 - Medical Transcription
 - MS Office and Internet
 - Multimedia and Animation
 - Net Programming
 - O Level (DOEACC)
 - OOPs through JAVA
 - Programming & Operation for Computerised Numerically Controlled Machines
 - Receptionist
 - Routing Technology CCNA
 - Security Guard
 - SQL Server Database Administration
 - TIG/MIG Welding
 - Visual Effects
 - Web Designing
 - Basic Hydraulics
 - Basic Pneumatics
 - CAD with Pro Enginners
 - Dot Net Technology
 - Graphics Design
 - Maintenance Battery
 - Repair and Maintenance of PA and Audio
 - Repair and Maintenance of Power supply, Inverter and UPS
 - Repair and Maintenance of Washing Machine and Microwave Oven
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- Repairing of Auto Air Conditioning
 - Repair and Maintenance of Intercom System
 - IT Tools and Applications
 - Maintenance Fitter
 - Material Testing
 - PC Maintenance
 - Sheet Metal Worker
 - Welder
 - Auto Body Painting
 - Diesel Fuel Injection Technician

TRAINING OF TRAINORS

- Technology Infusion cum Skill Development Programme
- TOT in Entrepreneurship & Skill Development in 2D Animation
- TOT in ESDP for Fashion Designing
- Training of Trainers (EDP)
- Accreditation Programme for EM Trainers

MANAGEMENT DEVELOPMENT PROGRAMS

- Delayed Payments to MSEs
 - Executive Development Programme on Achievement Motivation Training
 - Export Procedures, Documentation and Management
 - Extension Motivation Programme for Executives
 - Finance for Non-Finance Executives
 - Financial Statement Analysis
 - IPR Challenges and Prospects for MSMEs
 - Advanced Skill for Effective Office & Change Management
 - Advanced Skills for Effective Executive Secretaries and Change Management
 - Business Advisors' Training Programme
 - Business Development Plan for Micro & Small Enterprise
 - Capacity Building of Principals of ITIs
 - Productivity, Quality & Lean Manufacturing
 - Project Appraisal
 - Project Identification and Preparation of Project Profiles
 - Project Preparation Skills for Micro-Enterprises through SHGs
 - Strengthening Self-Help Groups for Urban Development Officials (under SJSRY)
 - Carbon Trading
 - Competency Building for Improved Performance
 - Contemporary Human Resource Management Practices
 - Cost Effectiveness in Economic Downturn
 - IPR for Competitive Advantage
 - ISO 9001:2008 Certification Process – Issues & Challenges
 - Logistics & Supply Chain Management and Retail Management
 - Marketing for Managers
 - MDP on Project Management for Small Business Enterprises in Tribal Areas
 - Modern Office Practice
 - Product Identification & Marketing Strategies
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OTHER SKILL INDIA COURSES

- Promotion of Induced Clusters
- Promotion of Micro-Enterprises
- Promotion of Service Enterprises
- Promotion of Viable Enterprises for SHGs
- Risk Management for SHGs
- Union Budget and MSMEs
- Assessment of SHGs for Promotion of Micro Enterprises
- Cluster Development
- Entrepreneurship & Skill Development for Partner Organisations/Agencies
- Financing & Management of CFCs
- Lending Strategies for MSMEs
- Orientation Programme for Officials of Industries & Commerce Department
- Orientation to Skill & Entrepreneurship Development under SJRY, PMEGP etc.

CONCLUSION

Based on the discussion above, some suggestion for policy may be offered here. First, for India to promote industrial development and achieve sustainable growth, it must increase its investment in education and training for youth. In exacting, to move further into a knowledge-based economy and move up the value chain, it is indispensable for India to improve the quality of education at every level. Second, the focus of India's skills development system does not correspond to either the level of skills demanded by industry or the overall levels of education of most young people. Thus, the government must ensure that most young people at least finish lower secondary school (i.e., 10th grade). What shape 'Skill India' will take and what it will do only time can tell. But no doubt it seems to be a good initiative – providing skills to people, especially because India is one of the few countries all across the globe whose working age populace will be very high, few years down the line, going by its ever-increasing growth of populace, as per the Globe Bank. It is also high time now measures are taken to improve the physical and mental development of the youths of the country so that none of them remains unemployed and the country's unemployment problem also gets reduced. It is time to open up avenues by which the youth accepts responsibility and no one remains idle because an idle youth is a burden to the economy.

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CONSUMER PERCEPTION TOWARDS AUTO-RICKSHAW LOAN IN MUMBAI AND THANE**John A. Menezes**Assistant Professor, Bunts Sangha's S. M. Shetty College of Science, Commerce and Management Studies,
Powai, Mumbai**INTRODUCTION**

Urbanization is on the rise throughout the world and there is no better example of this than India. In between 2001 and 2011 censuses, India recorded a growth of 17.7% in population, adding 181.5 million people. India's 2019 estimated population is 1.37 billion based on the most recent UN Data according to 'www.worldpopulationreview.com'. Over thirty percent of the population in India lives in cities, a number increasing rapidly due to economic migration from rural areas. This migration places stress on urban infrastructure that is constantly catching up with its rapid growth. In particular, urban transportation is in high demand as new residents need ways to get to jobs and other places, often living far away where housing is more affordable. Mumbai is India's largest city, with a population of over 12 million. The country as a whole has a population density of 416 people per square kilometer, which ranks 31st in the world, whereas Mumbai has a population density of 21,000 people per square kilometer and therefore has stark transportation challenges. In addition to private transport (personal vehicles, two-wheelers and cycles) and mass transit (trains and buses), there is a third form of transportation - intermediate public transport in the form of auto rickshaws and taxis – that serve an important role in the transportation system of the city.

Auto-rickshaws provide door-to-door service and act as a feeder mode to public transit, and many of train commuters use rickshaws to access the stations from their residential place. While auto-rickshaws serve an integral transport role to residents of Mumbai, there are still problems with the current system, from the perspective of passengers, drivers, and the government.

Hence the present study focused on loan facilities and pattern of Mumbai Rickshaw wala.

STATEMENT OF THE PROBLEM

1. There is lack of literacy among auto rickshaw drivers in Mumbai and Thane regions. Most of them are either school dropouts or not completed even basic secondary school (Matric).
2. Auto drivers are not much comfortable with banking activities as they generally operate on daily cash basis
3. Some auto drivers take personal loans instead of auto loans and end up paying higher interest and also there are chances of their auto getting seized or taken into custody by the financial institution due to non-payment of installment or dues.
4. Auto drivers take loans from cooperative credit societies or money lenders to avoid the paper work process.
5. Auto drivers are unaware of the schemes of loans available to them with regards to auto rickshaw loans.
6. There is red tapism in the loan process and at times auto drivers are cheated as they end up paying high rate of interest to money lenders and cooperative credit societies.
7. They do not have access to the formal financial services and remain dependent on the moneylenders.

RELEVANCE OF THE STUDY

1. Auto drivers without permit drive auto rickshaw of another person with permit on daily rental basis
2. There are less number of permits issued every year, which is issued under a lottery system
3. Auto rickshaw drivers do not get loans from nationalized and private banks due to improper paper work and non-possession of certain documents
4. There is lack of advertisement on part of the banks and financial institutions and lack of transparency in the loan sanctioning process

OBJECTIVES OF THE STUDY

1. To study the demographic profile of the auto-rickshaw drivers
2. To know the ownership and income pattern of rented and owned auto-rickshaw drivers
3. To know the sources of loan opted for auto-rickshaw finance
4. To understand the modes of payment of loan
5. To study the perception of loaned, owned and rented auto-rickshaw drivers towards auto-rickshaw loans

LIMITATION OF THE STUDY

Although the research reached its aim, there were some limitations which were unavoidable. Firstly because of time constraints the study was conducted with a small sample size of 345 respondents but only 343 were selected for analysis. Secondly, due to large spread of Mumbai and Thane Region, researcher have divided the area into more than 10 clusters but due to unwillingness of some people, had to collect the data through simple random and snowball sampling. Lastly, to generate results for a larger group, more samples should have been involved for the study.

RESEARCH METHODOLOGY OF THE STUDY

Table:-1: Summary of Research Methodology

Research Design	Descriptive
Population	Auto-rickshaw drivers in Mumbai and Thane Region
Sample Size	343
Sampling Frame	Auto-rickshaw drivers in the age group of 18 to 60 and above
Study Approach	Interview/survey through schedule and well-structured questionnaire
Data Type	Primary and Secondary
Sampling Type	Convenience Sampling and Simple Random Sampling

DATA ANALYSIS AND INTERPRETATION

A) DEMOGRAPHIC PROFILE

1. Age: Table No. 2

Age	No. of Respondents	% of Respondents
21 – 30	110	32%
31 – 40	121	35%
41 – 50	87	25%
51 – 60	23	7%
Above 60	2	1%
Total	343	100%

Source: Compiled from questionnaire

The above table indicates that maximum respondents falls under 31- 40 years of age group

2. Gender: Table no. 3

Gender	No. of Respondents	% of Respondents
Male	331	97
Female	12	3
Total	343	100%

Source: Compiled from questionnaire

The above table indicates that maximum respondents are male.

3. Educational Qualification: Table no. 4

Education Qualification	No. of Respondents	% of Respondents
Did not attend school	20	6%
Primary School	85	25%
Secondary school not completed	122	36%
Secondary school completed (Matric)	98	29%
Higher Secondary Completed	13	4%
Graduate	5	1%
Post Graduate	0	0%
Total	343	100%

Source: Compiled from questionnaire

The above table indicates that maximum respondents i.e. auto-drivers have not attained even a matriculation/secondary school certificate.

4. Auto-rickshaw Model: Table no. 5

Auto-Rickshaw Model/Brand	No. of Respondents	% of Respondents
Atul Auto Rickshaw	6	2%
Tuk-TuK Auto Rickshaw	4	1%
TVS	100	29%
Mahindra	5	1%
Piaggio	26	8%
Bajaj	26	8%
Bajaj RE	176	51%
Total	343	100%

Source: Compiled from questionnaire

B) Monthly Income: Table no. 6

Monthly Income	No. of Respondents	% of Respondents
0 – 5,000	7	2%
5,001 – 10,000	35	10%
10,001 – 15,000	192	56%
15,001 – 20,000	100	29%
20,001 and above	9	3%
Total	343	100%

Source: Compiled from questionnaire

The above table indicates that maximum earning of the group amongst the respondents is between 10,001 to 15,000 monthly and the minimum is 0 to 5,000 monthly out of the total respondents in the group

C) Type of Ownership: Table no. 7

Type of Ownership	No. of Respondents	% of Respondents
Owned	227	66%
Rented	116	34%
Total	343	100%

Source: Compiled from questionnaire

The above table indicates that maximum Auto Drivers have ownership.

D) SOURCE OF LOAN OPTED FROM

Out of 343 respondents, 227 respondents have ownership out of which 123 have opted for loan facility

Table no:- 8

Sources of Loan	No. of Respondents	% of Respondents
Nationalized Bank	27	22%
Private Bank	5	4%
Co-operative Bank	33	27%
Co-operative Credit Society	55	45%
Money Lender	3	2%
Total	123	100%

Source: Compiled from questionnaire

E) Mode of payment of loan: Table no:- 9

Mode of Payment	No. of Respondents	% of Respondents
Cash	109	89%
Cheque	5	4%
DD	0	0%
ECS	9	7%
Online Payment	0	0%
Total	123	100

Source: Compiled from questionnaire

Out of the total respondents the maximum 89 percent of drivers preferred cash as their mode of payment

F) Consumer Perception towards Auto-Rickshaw Loan:

Table no:- 10

Sr. No.	Particulars	1 – Strongly Agree	2 - Agree	3 – Neutral	4 – Disagree	5 - Strongly Disagree
1.	Do you suggest others to opt for auto rickshawloan?	75	29	11	3	5
2.	Auto rickshaw loan can be as a source for investing in auto rickshaws	64	45	6	6	2
3.	With an owned rickshaw one can earn more than a rented rickshaw	94	21	6	1	1
4.	The application form of auto loan is easy to understand	4	32	15	46	26
5.	The loan process has to be explained thoroughly	80	33	7	3	0
6.	You prefer EMI to be fixed by the bank	13	53	6	44	7
7.	The documentation and loan sanctioning procedure for loan is more	40	61	14	5	3
8.	The interest rate charged is reasonable	2	46	15	25	35
9.	The processing fee charged is low	2	35	48	31	7
10.	Banks should opt for online sanctioning of the loan	13	43	18	10	39
11.	The interest charged by the bank should be different on the basis of income level	24	57	24	16	2
12.	Seize of asset by bank is the right step, in case of non-payment of EMI	12	34	10	23	44
13.	You are satisfied with the facilities provided by the financial institution	8	62	20	25	8

Source: Compiled from questionnaire

FINDINGS

1. It was observed that the maximum Auto rickshaw driver have preferred Co-operative Credit Society as their source for availing for loan.
2. Cash is the most preferred mode for payment of loan
3. Majority of the respondents suggest that opting for loan is better than renting the auto and loan serves the purpose for investment in additional autos
4. Maximum respondents say that the loan application process is difficult to understand, the documentation is more and it should be explained thoroughly
5. 57 respondents agree that the interest charged by the bank should be different on the basis of income level
6. 62 respondents are satisfied with the facilities provided by the financial institution

SUGGESTIONS

A) To Auto-Rickshaw Drivers:

- a. Opting for loan from a Nationalized bank is more advisable than cooperative credit society or money lenders
- b. The rate of interest and amount of EMI to be paid should be known and fixed before finalising the loan process
- c. The rent paid per month for auto rickshaw is almost similar or even at times higher to the interest charged by the bank or financial institution. Thus opting for loan the auto driver can have ownership over the asset and also extend the number of hours he drives
- d. To generate more revenue an owned auto-driver can drive for 8 hours to 10 hours and after that give his auto-rickshaw on rent, which can earn him a daily rent in the range of Rs. 300 to Rs. 600 per day.

- e. This additional rent revenue can be a good source to pay off the loan EMIs and also meet incremental family expenses with regards to children school fees, medical bills, investments in the form of fixed deposits, recurring deposits which will be helpful in the long run.
- f. For auto-drivers having one owned rickshaw, auto-rickshaw loan can help him to buy additional auto-rickshaw which can be given on rental basis.
- g. One can get registered with OLA Auto services, which is now gaining more popularity and ensures convenient, transparent and quick service fulfilment using technology to make transportation hassle free for everyone. A registered driver can get income and also incentives on completing targets and number of rides per day.

B) TO BANKS AND FINANCIAL INSTITUTIONS

- a. Advertisement of Auto-Rickshaw loans should be done on a similar scale like that of other auto loans and personal loans. Banks can advertise in local newspapers,
- b. Since majority of the respondents were less educated, it is advisable for the banks to explain the loan application procedure and the interest charges available in the bank
- c. Most of the respondents claimed that seizure of the auto is not the right step in case of nonpayment of EMI, in such case bank should provide more breathing space for repayment of dues without charging penalty and fine for at least two to three months. It may lead to loss of revenue but build confidence in the minds of the customer thereby bring more customers in the long run and also create and build goodwill.
- d. Online sanctioning of the loan is not a good option since most of the respondents are not tech savvy.
- e. The banks should provide competitive interest rates and low processing fees to get more customers
- f. According to the research conducted majority of the respondents prefer to take loan from Nationalized Banks, so Nationalized banks can get more number of auto-rickshaw loans

C) TO THE GOVERNMENT

- a. There should be a steady increase in the number of permits provided to auto-drivers
- b. There should be more transparency in the permit process

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ROLE OF HR AS A STRATEGIC BUSINESS PARTNER: A NEW EXEMPLAR

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ABSTRACT

The e-Communication revolution is sweeping the world and creating an enormous change. This sudden eruption of opportunities in this era requires a planned manner of human resource for development which tends to compete in the global market.

To respond to global competition, an organizational strategy towards Human Resource Department has to be modified and make a little movement towards it. So, HR Department has to change its role from clerical, personnel and administrative services to a new role as a Business Partner to implement a right HR strategy in order to compete, to improve the productivity and efficiency of the organization.

The study analyze, the most Human Resource professionals are familiar with the concept of strategy, but now there is much more concentration and focus today towards as a strategic business partner than ever before. What HR can do to become a strategic business partner shows some clear actions that HR can take to compete in the global era.

So the strategy focuses on information technology community and how work processed and activities could be better organized which include talent development in HR, creating corporate centers of excellence, developing the right metrics and analytics, and perhaps most important, understanding how human capital management impacts business results, resources to benchmark employee performance.

In this study, we explore how HR can transform itself into a more effective resource for an organization, enhances its credibility, and evolve as a strategic partner.

Keywords: Talent Development, Strategy, Business Partner.

INTRODUCTION

In the past, HR organizations primarily have been concerned with operational details, such as payroll, benefits and hiring. While these functions still fall under HR's responsibility, successful leaders now realize that including HR managers in company planning exercises ensures that these and other HR functions, such as training and development, produce results that allow the company to achieve its strategic objectives. For example, if a company intends to outsource its customer support operations, the HR department needs to understand the ramifications of the decision, impact to existing personnel and transitional needs of the company in terms of training the new resources on company policies and procedures.

To be effective in the global marketplace, human resource departments increasingly must act as a strategic partner with other organizations in the company. Recruiting, interviewing and hiring the right personnel to produce quality products and services depend on good communication between managers in all branches of the business. The theories and principles associated with strategic HR management involve aligning all HR activities to the company's goals and objectives. By ensuring that all functions, such as marketing, finance, manufacturing and sales, get the right resources, the HR department enables the company's long-term success.

BUSINESS PARTNER

Management guru **David Ulrich** coined the term “**HR business partner**” in 1996.

The term “**business partner**” defines, to cover a range of jobs from administrative, strategic, and consultancy.

What is HR strategy?

“A coordinated set of actions aimed at integrating an organization’s culture, organization, people, and systems in order to get achieve the business goals.”

EMERGING ROLE OF HR**What Makes HR a Strategic Partner?**

The HR function has at least three identifiable roles that it can play.

First role as Clerical and Administrative: Its longest-running role is the delivery of clerical and administrative services, often consisting of satisfying legal and administrative compliance requirements.

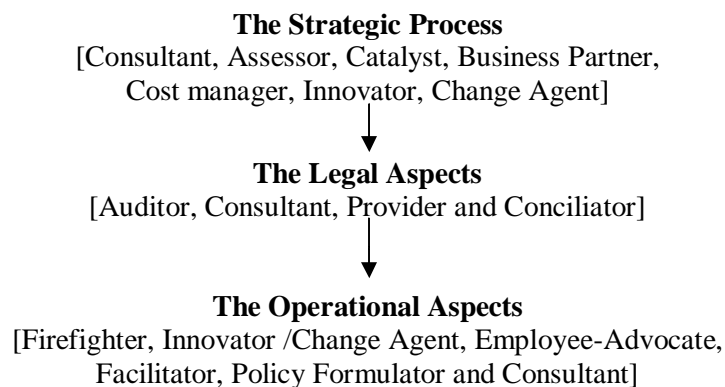
Second role as business partner: In this role, HR is expected to implement and deliver HR practices and services that support the organization’s business model and meet the demands of managers and employees.

Third role as strategic partner: In the last ten years have seen an increasing call for and HR is a member of the senior management team and is directly involved in the major business decisions of the organization, including the formation of strategy, the design of the organization and the implementation of the business model (Lawler, Boudreau & Mohrman, 2006).

These three roles can also be thought of as corresponding to a paradigm reflecting compliance, services and decisions, respectively (Boudreau & Ramstad, 2007).

The case for HR being a strategic partner is becoming stronger, as it rests on the reality that human capital and how it is organized are increasingly pivotal to organization effectiveness. There is ample evidence that how human capital is recruited, developed, organized and managed has a direct and strong influence on organizational performance (Huselid, 1995; Lawler, Mohrman, & Benson, 2001; Combs, Youngmei, Hall, & Ketchen, 2006). Thus HR leaders can make important contributions to strategy development and implementation as well as improve the quality of decisions related to strategy and talent.

THREE NEW MODEL ROLES TOWARDS HR AS STRATEGIC BUSINESS PARTNER:



Source: Edward E. Lawler III and John W. Boudreau

Overall, HR business partner works closely with other business leaders to put in place its strategy, steer its implementation, and make the best use of the organization’s people.

LINKING HR STRATEGY AND BUSINESS STRATEGY

To gain a competitive advantage, HR practices should be linked with those activities that link with the needs of the business and become more customer focused, HR as to develop new key roles based on different business strategy, competitors, technologies and customers.

The roles based on new strategy and where people spend time as:

- Business person
- Shaper of change
- Consultant to organization/partner to line
- Strategy formulator and implementer
- Talent manager
- Asset manager and Cost Controller

HR AS A STRATEGIC BUSINESS PARTNER

A Strategic business partner is a person who **‘takes part’** with others, and partnerships involve the ‘parts’ we each play in our work.

In general description how HR supports his or her business .Overall business strategy focuses on four areas:

- 1) **Innovation,**
- 2) **Business value,**
- 3) **Global integration, and**
- 4) **On-demand infrastructure.**

Behind this overall strategy are all of the employees who make it work.

A STRATEGIC HR APPROACH TOWARDS CORPORATE STRATEGY

Any corporate strategy to develop and to approach is to begin by addressing three key strategic questions:

1. **Where are we now?**
2. **Where do we want to be?**
3. **How do we get there?**

HR is a critical area to help the organization and all we do must be relevant to our corporate objectives.

That’s why the human resources also have to add two others questions in developing such a strategy two critical questions must be addressed:

1. **What kinds of people do you need to manage and run your business to meet your strategic business objectives?**
2. **What people programs and initiatives must be designed and implemented to attract, develop and retain staff to compete effectively?**

In order to answer these questions four key dimensions of an organization must be addressed. These are:

- **Culture:** the beliefs, values, norms and management style of the organization
- **Organization:** the structure, job roles and reporting lines of the organization
- **People:** the skill levels, staff potential and management capability
- **Human Resources systems:** the people focused mechanisms which deliver the strategy – employee selection, communications, training, rewards, career development, etc.

POTENTIAL OF BECOMING A STRATEGIC PARTNER WITH MANAGEMENT: COMPETENCIES

To have an ounce of potential of becoming a strategic partner with management, there are a few competencies that you must master. While I have seen numerous lists detailing these competencies, I like the list that Dave Ulrich provides in his book, Human Resources Champions. Three of the key competencies he detailed are:

- Business Mastery
- Personal Credibility
- Human Resources Mastery

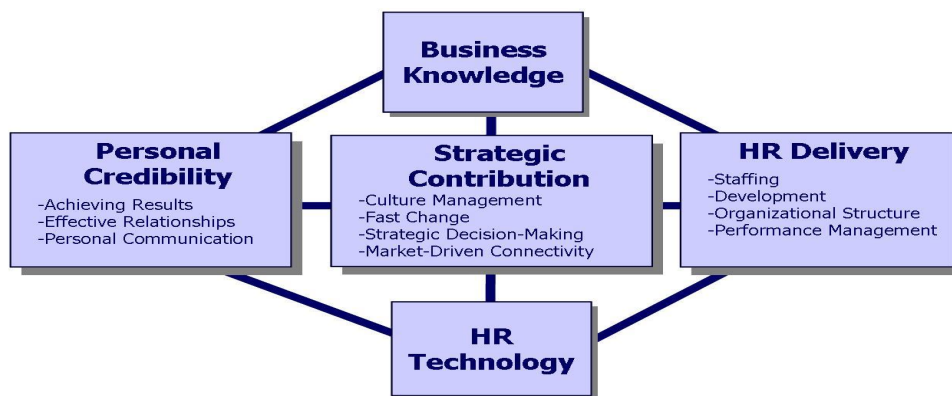


Fig 1: Dave Ulrich book: Human Resources Champions

Making it Happen Okay, now that we are clear on the competencies required to become a strategic partner. Let’s talk a little more about how to make this happen. We have all heard the various ways that human resources are typically viewed: the policeman, too costly, unresponsive, slows the business down, etc. Well, now we have to figure out ways to change these perceptions. The first step will be to demonstrate mastery of the competencies; the second step will be to align human resources with the business strategies. The best way to do this is to develop a *performance plan* for human resources based on the business strategies.

Once the human resources strategies are aligned with the business strategies, you need to constantly revisit this connection, especially as the organization and business changes. In addition, it is advisable to take additional steps to ensure that you are positioning yourself to be viewed as a strategic partner. Some ways to do this may include:

- Get involved (participate on employee task teams)
- Participate in the organization’s strategic planning (invite yourself or offer input)
- Walk the talk (be a company champion)
- Volunteer to lead a companywide activity (not just the company picnic).

Four options that can define hr's involvement in the organization are as follows

- HR maintains total control of the work, from "concept to customer.
- HR develops the strategy and implementation plans and manages the service delivery process.
- HR designs and provides the tools that enable other professionals to do the work.
- HR ensures that service-level agreements are maintained.

LEVERAGING BEST PRACTICES

Hewitt identified several common themes after conducting the HR activity analyses.

1. Spending money on the wrong things.
2. Expensive people performing administrative tasks.
3. Unqualified people handling areas better addressed by trained specialists.
4. Inefficient processes.
5. "We do that?"

POSITIONING OF HR AHEAD

According to Hewitt consultant John Sanders, here are five valuable ways in which HR professionals can position themselves for the HR industry changes that lie ahead.

- Understand your direction.
- Understand your customers.
- Provide HR leadership.
- Get the processes right.
- Recognize it's a mind-set.



STRATEGIES THAT SUPPORT HR AS A STRATEGIC BUSINESS PARTNER

An HR strategic role within organizations to implement programs to support the goals of the business and the best way to be treated as a strategic business partner is to think and act like. Which means?

- Really understand the business.
- Get out of your box

- Be useful in a big way.
- Listen.
- Get out of the middle.

EFFECTIVE PRACTICES

- **Retaining Talent:** To analyze and manage employee turnover
- **Developing Leadership Talent:** A replacement planning process to succession planning and leadership development
- **Employee Engagement and Commitment:** A process to understand measure and increase engagement in the organization.
- **4 R's strategy:** Retrenchment, Retraining, Retaining, Redeploy.

CONCLUSION

Overall, the road map for HR becoming more of a strategic partner seems clear both with respect to what it needs to do to be involved in a variety of strategic activities and to become a full strategic partner. HR needs to organize itself so that it has skills and expertise at the corporate level. It needs to have metrics and analytics that measure the impact of human capital practices and programs. It needs to improve decisions by bringing HR analysis and knowledge to them. Finally, it needs skill sets that involve organizational design, business strategy and metrics and analytics. It is easier to point to what HR needs to do than to make it happen. Still, if HR fails to advance, it seems likely that its strategic partnership will remain limited. There is a “stub born traditionalism” that characterizes the HR profession.

Having mastered the business knowledge will mean nothing if you don't establish *credibility* with others in the organization. This means you need to be responsive (answer your phone and return calls in a timely manner), keep commitments (show up and be on time to meetings), share insights on issues being discussed (even if your view is different), demonstrate the value of human resources activities (we can be a cost saver too), interface with management whenever possible (build those personal relationships), and need I even say it - be ethical!

So, HR strategy must be aligned with the organization's vision, mission and goals, it must analyze the characteristics of its industry, determine its competitive advantage, and identify key processes and key people and also identify the company characteristics that motivate and energize those employees who fulfill the demand and which helps to create different strategies for all groups of people in the organization depending on their skills, knowledge and responsibilities to implement a HR Strategy successfully.

“THINKING ON YOUR KNEES”

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SYNTHESIS, CHARACTERISATION AND BIOLOGICAL ACTIVITY OF 2-(2-(5-(4-ETHOXYPHENYL)-3-PHENYL-4,5-DIHYDRO-1H-PYRAZOL-1-YL)-2-METHYL-4-OXO-3-SUBSTITUTED PHENYL THIAZOLIDIN-5-YL) ACETIC ACID

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ABSTRACT

This article includes the synthesis of thiazolidinone based heterocyclic derivatives has been presented. 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-substituted phenyl thiazolidin-5-yl) acetic acid were synthesised by condensation of (E)-3-(4-(methoxy) phenyl)-1-phenylprop-2-en-1-one with acetic acid and hydrazine followed by cyclization of Schiff's bases with 2- mercaptosuccinic acid to give corresponding derivatives of 2-(2-(3,5-diphenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-phenylthiazolidin-5-yl)acetic acid. Thiazolidinones is very important for medicinal chemistry, because many of thiazolidinone derivatives have shown significant biological activity. These compounds have shown biological activity as antibacterial and anti-inflammatory activities The structural analysis of synthesized compounds was done by spectral studies (IR and ¹H-NMR) and elemental analysis. The synthesised compounds were also screened for antibacterial activity against *Staphylococcus aureus* and *Escherichia coli*.

Keywords: chalcones, Thiazolidinones and antibacterial activity.

INTRODUCTION

Heterocyclic compounds show unique chemical properties and many biological activities, therefore they are very important to the medicinal chemists. Many heterocyclic compounds such as imidazole, thiazole, oxadiazole and pyrazole possess biological activities. Thiazole is a very important heterocyclic compound which shows many pharmacological activities like anticancer¹, antibacterial², antifungal³, antidiabeti⁴, antimicrobial⁵ etc. These diversity in biological activity of thiazolidine has attracted many researchers to explore its structural activity. Thiazolidine derivatives have been reported as anticancer, anti inflammatory and many other biological activity⁶⁻⁸. The present work reports the synthesis of certain 4-oxothiazolidinyl derivatives containing pyrazole moiety using Schiff Base.

EXPERIMENTAL

The determination of melting point was done using ANALAB Automatic Melting point apparatus with open capillary tubes and are therefore uncorrected. IR spectra (KBr) were recorded on a Perkin-Elmer Frontier (FTIR) spectrometer and proton NMR spectra of compounds were recorded in DMSO by Bruker 400 MHz FT-NMR Spectrometer. Reactions progress was monitored by TLC carried on silica gel plates, the spots were located by using UV chamber.

Synthesis of 1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl) ethanone(I)

This compound is prepared by reported method⁹. (E)-3-(4-(methoxy) phenyl)-1-phenylprop-2-en-1-one (2.94 g, 10mmol) and hydrazine hydrate (1.0 g, 20mmol) in acetic acid (25 ml) were mixed in 50cm³ round bottom flask, followed by addition of two drops of concentrated hydrochloric acid. The mixture was refluxed for 5 hours. The precipitated solids were filtered, dried and recrystallized from ethanol. The crystals, suitable for X-ray diffraction analysis, were obtained from a mixture of ethyl acetate and dichloromethane (v:v / 1:1) by slow evaporation. Reported m.p. : 172°C Literature m.p. 174.36°C

IR (KBr,cm-1): 3445 (NH), 2925, 2842 (C-H), 1672 (C=O, cyclic), 1615 (C=N), 1310 (C-N), 785 (C-Cl); ¹H NMR (CDCl₃, δ, ppm): 3.70 (s, 2H, -CH₂-), 6.25-7.63 (m, 10H, Ar-H) 9.45 (s, 1H, -NH-).

General preparation for the synthesis of N-(1-(5-(4-substituted phenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene)aniline [Schiff Bases] (II a-e)

A mixture of 1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethanone (2.94 gm, 0.01 M) in 30 ml ethanol and substituted aniline (0.01 mol) was taken in round bottom flask and swirled thoroughly. The reacting mixture was then refluxed for required 3 hours. Completion of the reaction mixture was monitored by TLC using hexane:ethyl acetate (7:3) The reaction was allowed to cool to room temperature and kept for 4 hour. The solid separated was filtered by suction, washed with ethanol and dried. The crude product was purified by crystallised form ethanol.

SPECTRAL STUDIES

II(a). N-(1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene)aniline:

White Solid, Yield :67%, m.p. 143°C ,m/z : 369

IR (KBr) cm^{-1} : 3390 (-NH) cm^{-1} , 1215 (-C-O) cm^{-1} , 2920 (-CH), 1578 (C=N) cm^{-1}

$^1\text{H-NMR}$ (DMSO- d_6): 2.17(s, 3H, CH₃), 3.32(s, 3H, OCH₃), 6.94-7.18(m, 13H, Ar-H), 10.16(s, 1H, NH).

II(b). 4-methoxy-N-(1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene) aniline:
Cream white Solid, Yield :63%, m.p. 148°C,m/z : 399

IR (KBr) cm^{-1} : 3390 (-NH) cm^{-1} , 1150 (-C-O) cm^{-1} , 2920 (-CH), 1569 (C=N) cm^{-1}

$^1\text{H-NMR}$ (DMSO- d_6): 2.35(s, 3H, CH₃), 2.99 -3.82(s, 6H, OCH₃), 2.17(s, 3H, CH₃) ,7.03–8.34(m, 12H, Ar-H).

II(c). 2,4-dichloro-N-(1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene) aniline
: Off white Solid, Yield :69%, m.p. 144°C,m/z : 437.11

IR (KBr) cm^{-1} : 3430 (-NH) cm^{-1} , 762 (C-Cl), 1292 (-C-O) cm^{-1} , 2824 (-CH), 1614 (C=N) cm^{-1}

$^1\text{H-NMR}$ (DMSO- d_6):2.35(s, 3H, CH₃),2.99-3.82(s, 6H, OCH₃), 2.17(s,3H, CH₃),7.08-7.13(d,12H,Ar-H).

II(d). N-(1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene)-3-nitroaniline:

Yellowish white Solid, Yield : 60%, m.p. 147°C,m/z : 414.17

IR (KBr) cm^{-1} :3435 (-NH) cm^{-1} ,1295 (-C-O) cm^{-1} ,2843 (-CH) cm^{-1} ,1362 (N=O) cm^{-1} ,1315 (C-N) cm^{-1} , 1602 (C=N) cm^{-1}

$^1\text{H-NMR}$ (DMSO- d_6): 2.35 (s, 3H, CH₃), 2.99 -3.82 (s, 6H, OCH₃), 2.17 (s, 3H, CH₃) ,7.99-8.10 (m, 12H, Ar-H).

II(e). N-(1-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)ethylidene)-4-methylaniline:

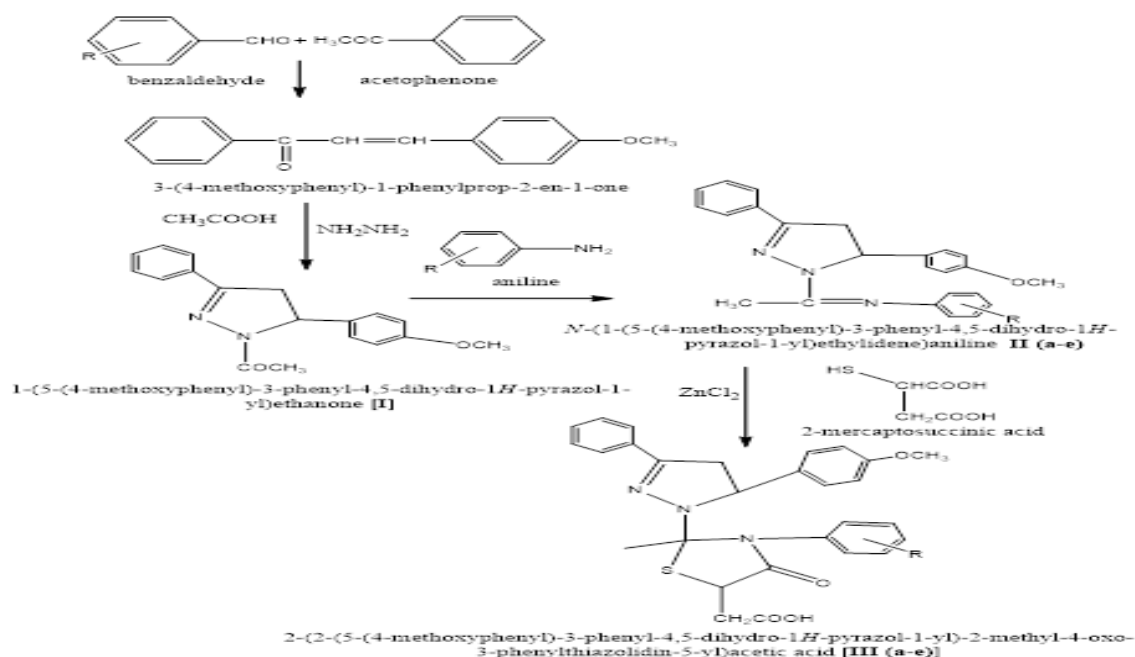
White Solid, Yield :65 %, m.p. 138°C ,m/z : 383

IR (KBr) cm^{-1} : 3390 (-NH) cm^{-1} , 1215 (-C-O) cm^{-1} , 2920 (-CH), 1578 (C=N) cm^{-1}

$^1\text{H-NMR}$ (DMSO- d_6): δ 2.34 (d,3H,CH₃), 2.17 (s, 3H, CH₃), 3.78 (s, 3H, OCH₃), 6.94-7.18 (m, 8H, Ar-H),7.20 (d,4H,Ar-H).

General method for the synthesis of 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-substituted phenyl thiazolidin-5-yl)acetic acid(III a-e)

A mixture of Schiff Base (II a-e) (0.01 mol) and 2-mercaptosuccinic acid (1.50g, 0.01 mol) dissolved in DMF (25 ml). A pinch of anhydrous ZnCl₂ is then added and refluxed for 8-10 hrs in oil bath. Completion of mixture was confirmed by TLC using benzene : chloroform (8:2). The reaction mixture was then poured into crushed ice, filtered and washed with water. After drying the crude product was recrystallised using absolute ethanol. General method has been shown in scheme 1.



Scheme 1 : Synthesis of 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-phenylthiazolidin-5-yl)acetic acid.[III a-e]

Compound	R	MolecularFormula	% yield	Melting Point	m/z
IIIa	-H	C ₂₈ H ₂₇ N ₃ O ₄ S	62	165°C	501.17
IIIb	4- OCH ₃	C ₂₉ H ₂₉ N ₃ O ₅ S	69	171°C	531.18
IIIc	2,4 - Cl	C ₂₈ H ₂₅ Cl ₂ N ₃ O ₄ S	67	180°C	569.09
III d	3-NO ₂	C ₂₈ H ₂₆ N ₄ O ₆ S	71	175°C	546.16
IIIe	4-CH ₃	C ₂₉ H ₂₉ N ₃ O ₄ S	73	168°C	515.19

SPECTRAL STUDIES

III(a). 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-phenylthiazolidin-5-yl)acetic acid:

IR (KBr) cm⁻¹: 3061,2936(Ar-CH),1742, 1682 (C=O),1601(C=N),1704 (C=O,thiazol ring),1511 (C=C).

¹H-NMR (DMSO-d₆): 3.39-3.43 (dd,1H,C4-H of Pyrazole),3.91-3.96(dd,1H,C4-H of thiazole),6.92-7.18(m, 13H, ArH),11.0 (s,-OH), 3.06(d,2H, -CH₂COOH).

III(b). 2-(3-(4-methoxyphenyl)-2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxothiazolidin-5-yl)acetic acid:

IR(KBr) cm⁻¹: 2850(Ar-CH), 1742,1672(C=O),1607(C=N),1704(C=O,thiazol ring),1511(C=C),1108 (C-O-C),1637 (N=CH)

¹H-NMR (DMSO-d₆): 3.39-3.43 (dd,1H,C4-H of Pyrazole), 3.91-3.96 (dd,1H,C4-H of thiazole),7.04-7.38 (m, 13H, ArH),11.0 (s,-OH), 3.06(d,2H, -CH₂COOH), 3.83 (s,3H, -OCH₃).

III(c). 2-(3-(2,4-dichlorophenyl)-2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxothiazolidin-5-yl)acetic acid:

IR (KBr) cm⁻¹: 749 (C-Cl), 1736 (C=O of thiazolone), 3076 (Ar-CH), 1742, 1600 (C=N) cm⁻¹, 1511 (C=C),1108 (C-O-C),1637 (N=CH)

¹H-NMR (DMSO-d₆): 3.39-3.43 (dd,1H,C4-H of Pyrazole), 3.91-3.96 (dd,1H,C4-H of thiazole),7.18-7.86 (m, 12H, ArH), 10.9 (s,-OH), 2.89 (d,2H, -CH₂COOH), 3.92 (s,3H, -OCH₃).

III(d). 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-3-(3-nitrophenyl)-4-oxothiazolidin-5-yl)acetic acid:

IR (KBr) cm⁻¹: 1764 (C=O of thiazolone), 3076(Ar-CH), 1742, 1680 (C=N) cm⁻¹, 1511 (C=C), 1312 (C-N),1637 (N=CH),1554,1362 (N=O).

¹H-NMR (DMSO-d₆): 3.39-3.43 (dd,1H,C4-H of Pyrazole), 3.91-3.96 (dd,1H,C4-H of thiazole),7.99 (s, 4H, ArH), 7.08-7.79 (m,9H,ArH),2.62 (s,3H,CH₃),10.9 (s,-OH), 2.89(d,2H, -CH₂COOH), 3.92 (s,3H,-OCH₃).

III(e). 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-(p-tolyl)thiazolidin-5-yl)acetic acid:

IR (KBr) cm⁻¹: 2967(CH, aliphatic),1736(C=O of thiazolone), 3049(Ar-CH),1742, 1598(C=N) cm⁻¹, 1511 (C=C), 1637 (N=CH).

¹H-NMR (DMSO-d₆): 2.42 (s,3H, CH₃), 3.39-3.43 (dd,1H,C4-H of Pyrazole), 10.9 (s,-OH), 3.78-3.84 (dd,1H,C4-H of thiazole),7.18-7.86 (m,12H, ArH), 2.89 (d,2H, -CH₂COOH).

ANTIMICROBIAL ACTIVITY

The antibacterial activity of all the synthesized compounds [III(a-e)] were examined against different Gram positive bacteria (*Bacillus subtilis* ATCC 25923 and *Staphylococcus aureus* ATCC 6051) and Gram negative bacteria (*Escherichia coli* ATCC 25922) by measuring zone of inhibition. Preparation of nutrient broth, subculture, base layer medium, agar medium and peptone water were done as per the standard procedure¹⁰. Discs measuring 6.25mm in diameter were punched from Whatman No.1 filter paper. Stock solutions of synthesized compounds diluted in DMF. The antibacterial activity was performed by Paper disc method. Test compounds were dissolved in 10% DMF, to produce the concentration level 50mcg/ml solution. Ciprofloxacin was used as standard drug at a concentration of 50mcg/ml. The test samples and

standard drugs were placed in a bore made in petridishes which contained different organisms and incubated at 37°C for 24 h. The results of the antibacterial activity was determined by measuring the zone inhibition and the result are given in Table (II).

Antimicrobial Activity: Zone Of Inhibition (50mcg/ml) (mm)			
	Gram positive bacteria		Gram negative bacteria
Compound no.	<i>S.aureus</i>	<i>B. Sutilis</i>	<i>E. Coli</i>
III -a	15	18	12
III -b	20	22	23
III-c	14	17	6
III-d	10	14	15
III-e	18	20	18
Ciprofloxacin	25	24	30

Table (II)

Antimicrobial activity of 2-(2-(5-(4-methoxyphenyl)-3-phenyl-4,5-dihydro-1H-pyrazol-1-yl)-2-methyl-4-oxo-3-phenylthiazolidin-5-yl)acetic acid.[III a-e].

RESULT AND DISCUSSION

The Scheme of synthesised Schiff Base and thiazolidinone derivatives is shown above. All the derivatives are characterised by FTIR and ¹H-NMR.. The ¹H-NMR spectra (DMSO) of the Schiff bases (IIa-e) exhibited signals at 2.17 ppm due to the azomethine protons which indicated the formation of Schiff base.

Thiazolidine-4-one derivatives (III a-e) prepared by adding 2-mercaptosuccinic acid to Schiff base derivatives with anhydrous zinc chloride, FTIR spectrum of these derivatives show disappearance (–N=CH–) group and the absorption bands at (1750-1743) cm⁻¹ appear due to carbonyl group, ¹H-NMR used to characterization for some of the derivatives show appear signals due to methylene and carbonyl groups in thiazolidinone ring. A singlet due to the - OH proton of – CH₂COOH group appeared at 2.89 for the thiazolidinone derivatives (III a-e), which is absent in Schiff base (II a-e). All the synthesised Thiazolidinones were screened for the antimicrobial activity. Compounds III(c) and III(d) which contain electron withdrawing chloro and Nitro functional group respectively did not promote much activity against E.coli., whereas compounds III(b) and III(e) which contain electron donating methoxy and methyl functional group show promising activity against S.aureus, B.Subtilis and E.coli.

ACKNOWLEDGEMENT

Authors are grateful to the SICART Lab, Vallabh vidhyanagar for supporting in spectral data to carry out the research work and Mr. Varghese Thomas, H.O.D. of Microbiology, Shri Adarsh Science College for antimicrobial activity. Author also acknowledge Mr. Sandip Zala and Mr.Jigar Patel for their valuable contribution.

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A Conflict of Interest: The authors declare no conflicts of interest.

WOMEN EMPOWERMENT FOR NATION BUILDING

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ABSTRACT

Education among women is the most powerful tool of attaining power in the society. It helps in reducing inequalities and functions as a means for improving their status within the family. As we all know that education is must for everyone but unfortunately, in this male dominating society, the education of women has been neglected for a long time. Empowering women is an important end in itself and as women acquire the same status, opportunities and social, economic and legal rights as men, as they acquire the right to health and gender based violence, human well-being will be enhanced. The present study explores the role of education in women empowerment and the status of women education in India. It shows that the education is most important part in the life of every woman.

INTRODUCTION

Empowerment is instrumentally important for achieving positive development outcomes and well-being of life which lies in the doing and being what one value and have reason to value i.e. agency. Sen make a strong claim for increasing the agency of the individual to enable them to be an effective agent of their own well being and development. The concept of empowerment is very complex in itself indeed very fuzzy also; different scholars hold different definition of empowerment according to the need of their work. Women's agency, autonomy and empowerment are widely used idea in development literature and capability approach. But there exists substantial ambiguity in conception of these ideas. While women's well being and women's agency is sufficiently distinguished from each other, there seems to be a large overlap between agency and empowerment and between agency and autonomy.

LITERATURE REVIEW

Noreen and Khalid (2012) explored the possibilities and opportunities for women empowerment and how the participants in the study understand the role of higher education in empowerment of women at home and at work. They found out that the women should continue higher education and career by strategizing and acknowledging the support of their family members. Banerjee (2012) studied the empowerment of women through higher education. She concluded that the empowered women challenged the man in their workplace and were seen in the powerful corporate positions. Kandpal et al (2012) studied the participation in community level female empowerment program in India increases participants physical mobility, political participation and access to employment. Murtaza (2012) examined the current status of women in higher education in Gilgit Baltistan. He examined the challenges faced by the women were harassment at work places and work load. The parents didn't spend similar amount in educating their daughters as compare to their sons. Sonowal (2013) studied the effect of the SC and ST women in the rural areas of Sonitpur district. He found that the status of women in the present society, attitude of parents and guardians towards girl education. Taxak (2013) studied the disparity in education across the socio economic spectrum in India.

EDUCATIONAL SYSTEM IN INDIA:

The vast majority of the world's poor population is women. "Around the world, healthy, educated, employed and empowered women break poverty cycles not only for themselves, but for their families, communities, and countries too." According to United Nations World's Women 2010 Trends and Statistics, two-third of the world's illiterate population is female. The majority of school age children, not in school are girls. Women all over the world are challenged by a number of obstacles that restrict their ability to play significant roles in their communities and the broader society. Today, HIV/AIDS is rapidly becoming a woman's disease. Near about 60 percent of people living in Sub-Saharan Africa were sufferings with HIV/AIDS. When we talk about our country, the country has grown from leaps and bounds since its independence where education is concerned, the gap between women and men is severe. While 82.14% of adult men are educated, only 65.46% of adult women are known to be literate in India. Additionally, the norms of culture that state that the man of the family is the be-all and end-all of family decisions is slowly spoiling the society of the country.

IMPORTANCE OF WOMEN EMPOWERMENT

- Opportunities for development
- Career development

- Leadership
- Communication
- Image
- Work life balance
- Equal opportunities & fair treatment
- Pay & benefits
- Responsible
- Health & safety
- Job satisfaction

Reflecting into the “ Vedas Purana” of Indian culture, women is being worshiped such as LAXMI MAA, goddess of wealth; SARSWATI MAA, for wisdom; DURGA MAA for power. The status of women in India particularly in rural areas needs to address the issue of empowering women. About 66% of the female population in rural area is unutilized. This is mainly due to existing social customs. In agriculture and Animal care the women contribute 90% of the total workforce. Women constitute almost half of the population, perform nearly 2/3 of its work hours, receive 1/10th of the world’s income and own less than 1/ 100th the world property. Among the world’s 900 million illiterate people, women out number men two to one. 70% of people living in poverty are women. Lower sex ratio i.e. 933, The existing studies show that the women are relatively less healthy than men though belong to same class. They constitute less than 1/7th of the administrators and mangers in developing countries. Only 10% seats in World Parliament and 6% in National Cabinet are held by women.

CONCLUSION-

In the earlier work on empowerment, agency and autonomy, these concepts have been treated as coterminous or have been used interchangeably; broadly including the ability to make authentic choices and to have resources to exercise these choices. However, they can substantially diverge from each other and one may not reflect into the other, for instance women from south India have very good access to resources but very low level of autonomy. This highlights the need for identification of some cultural factors having bearings on empowerment and autonomy.

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IN-SILICO INHIBITION STUDIES OF ORGANO-SULPHUR BASED NATURAL PRODUCTS AS AN ANTI-CDKS AGENTS

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ABSTRACT

Using computer based molecular modelling tools, interactions between naturally occurring Organo-sulphur based compounds with crystal structures of CDK4 mimic CDK2 enzyme having PDB ID: 2FHI. The binding energies between these compounds and receptor enzymes are calculated using in-silico techniques in the form of ΔG in Kcal/mol. The reported binding energies for the selected molecules are ranging from -11.70 Kcal/mol to -8.97 Kcal/mol. The negative docking energies and better inter-molecular electrostatic, hydrophobic interactions supports the affinity of organo-sulphur based natural products as potent CDK inhibitor.

Keywords: Natural Product, Organo-Sulfur, CDK, Docking.

INTRODUCTION

The discovery of new anti-cancer agent is a very long, expensive and risky process. However recent advances in computation chemistry and biological sciences are now yielding new paradigms that allow the researchers to model and understand drug targets and to discover drugs that are cheaper and safer than the existing ones within a short time span. These technologies include virtual screening, pharmacophore development and structure based optimization.¹ The drug discovery process activates from the selection with target enzyme. The drug molecule interacts with target enzyme and inhibits it.

The successful inhibition of enzyme with small drug molecule stops the normal functioning of enzyme and hence cessation of normal enzyme functionality.²

ROLE OF CDK IN CELL CYCLE

CDKs are a group of Serine/Threonine kinases that form active hetero-dimeric complexes by binding to their regulatory subunits, Cyclins. Several CDKs, mainly CDK2, CDK4, and CDK6, work cooperatively to drive cells from G1 phase into S phase. CDK4 and CDK6 are involved in early G1 phase, whereas CDK2 is required to complete G1 phase and initiate S phase. Both CDK4 and CDK6 form active complexes with the D type of cyclins (Cyclins D1, D2, and D3). The essential role of CDKs in cell cycle progression makes them a target of great interest for the development of specific inhibitors as anti-cancer agents.³ The majority of plant origin compounds is tested against CDKs and found active but still the interactions involved between these compounds and CDKs are not studied in detailed.

NATURAL PRODUCTS

Natural product based organic compounds play vital role in the treatment of human disease. The WHO estimates that 80% of the world population presently uses herbal medicine for some aspects of primary health care.⁴ Paclitaxel is in many countries approved for the treatment of ovarian and breast carcinoma and also has important activity against non-small cell lung cancer.⁵

In-vitro analysis of plant origin compounds against cancer cell lines are major research areas. The most important problem with this analysis is to know the scientific reasons of interactions between chemical compounds and cell organelle. To improve the drug likeness of the chemical compounds, the inhibition information is most essential one. Availabilities of various state-of-arts, computer based, drug discovery tools help in providing the insight of interactions between small molecules and target enzymes. The importance of these tools is due to their ability to show the possible interactions between ligand and receptor enzyme at atomic level.

The most prominent technique is docking of small molecule with target enzyme which calculate the probable binding energies between them and explore the numerous possibilities of ligand confirmations inside enzyme active sites. Binding energy in kcal/mol is the major parameter investigated using these programs along with steric, hydrophobic and electrostatic interactions. It also provides the list of possible hydrogen bonding.

In present study, organo-sulphur based compounds are selected and tested for their inhibition possibilities with CDK4 mimic CDK2 (PDB ID: 2FHI) enzyme using molecular docking techniques.

The aim is to investigate the possible binding energies, various interaction poses, and possible hydrogen bonding and hence understanding the effectiveness of these molecules as a CDKs inhibitor, particularly CDK4 inhibitor.

MATERIALS AND METHODS:

To study inhibition of enzyme with naturally occurring Organo-Sulfur based compounds are designed in-silico using *ChemOffice* software.⁶ Initially 2-D structures were designed. The 3-D conformations of the design compounds were achieved using Molecular mechanism (MM2) method with the help of *ChemOffice* software.

The finalized 3D structures of molecules were tested for global minima by ascertaining the minimum energy values of the molecule. The list of compounds designed is listed in **Table 1**.

Table-1: List of Organo-Sulfur-Based Phytochemicals.

Molecule Number	Phytochemical Name	Molecular Formula
1	Anethol Trithione	C ₁₀ H ₁₀ OS ₃
2	Benzyl isothiocyanate	C ₈ H ₇ NS
3	N-acetyl-S-allylcysteine	C ₈ H ₁₃ NO ₃ S

Selection and Preparation of Receptor Enzyme: The selected target enzyme is the crystal structure of CDK4 mimic CDK2 (PDB ID: 2FHI) downloaded from online resources.⁷ The structure is having uniqueness by having active site of CDK4 into the structure of CDK2.⁸ CDK4 has an additional space that accommodates large substituents. Inhibitors designed to bind into this large cavity of CDK4 must be selective only for CDK4 without having substantial CDK2 activity. The structure is checked for any missing atoms or residues and solvation process performed followed by preparation of the enzyme grid for the docking process using ARGUSLAB.⁹ The place of natural inhibitor into the enzyme is selected as the active site for docking process.

Docking small molecule with receptor enzyme: Docking is a virtual procedure to interact ligand with receptor site of enzyme. Autodock¹⁰ is used to study the interactions of designed compounds with selected enzyme. This program has a number of tools to perform the docking process.

In the present study two types of docking were performed.

- i) Non-genetic algorithm
- ii) Genetic algorithm

NON-GA is the general docking procedure whereas GA is one of the intelligence search algorithms. It searches the best ligand conformation inside the active site of enzyme very fast and also provides a higher number of conformations. This helps in finding stable and active conformations of ligand into the binding site of the enzyme. Table 2 depicts the various parameters used for docking.

Table-2: Parameters for Non-genetic and Genetic docking.

Grid Resolution	= 0.4
Number of Steps	= 250
The population size	=100
Maximum Generation	=10000
Elitism Number	=5
Crossover Rate	= 0.8
Mutation Rate	= 0.2
Local Search Rate	= 0.06
Local Search Maximum Iteration	=50
Converged When <i>rmsd</i> Population Fitness	< 1 Kcal. /Mole
Grid Dimensions	= 67 x 77 x 61
Total Number of Grid Points	= 314699
RMSD Calculation: 2 Å with defined rotatable bonds and active torsions set to fewest atoms	
Grid Resolution	= 0.4
Grid Dimension	= 40, 40, 40 in X, Y, Z dimensions

The docking algorithm makes use of force field equations and parameters to calculate the docking energy between ligand and enzyme.¹¹ The docking energy is the total of van der Waals interactions, H-bond interactions, electrostatic interactions and the internal static energy of the ligand.¹²

$$\Delta G_{\text{bind}} = \Delta G_{\text{vdw}} + \Delta G_{\text{hydrophobic}} + \Delta G_{\text{H-bond}} + \Delta G_{\text{H-bond (chg)}} + \Delta G_{\text{deformation}} + \Delta G_0 \quad (1)$$

The obtained results of docking energy for Non-GA and GA Docking for each set of experiments are listed in table 3. The negative values of docking energies favor the interaction among ligand and enzyme. Though there are chances of non-favorable interactions marked as '*’.

Table-3: List of observed docking energy of Organo-Sulfur based compounds with CDK4 MIMIC CDK2 enzyme

Molecule Number	Docking Energy (ΔG) in Kcal/mol	
	Non-GA	GA
1	-8.67241	-11.7013
2	-8.51382	-9.92425
3	-8.71	-8.97003

RESULTS AND DISCUSSION

The docking simulation technique was performed using AUTODOCK program, each compound was docked with 2FHI enzyme. The lowest energy docked conformation of the most populated cluster (the best cluster) was selected and taken into account. The reported values of docking energies are between -8.5 Kcal/mol to -8.7 kcal/mole and -11.7 Kcal/mol to -8.97 kcal/mole for Non-GA and GA docking respectively. For further analysis and comparisons only GA docking is considered.

Hydrogen bonds play a vital role in giving stability to the ligand-enzyme complex. The strength of the hydrogen bonding evaluated from the bond distance. Autodock provides the possibilities of hydrogen bond between ligand and enzyme. Though software reports nearly all possibilities of hydrogen bond, but only those bonds having a length less than 3°A are counted and others are discarded.

Depending on the docking energy and hydrogen bond, organo-sulfur based compounds are further analyzed. The various docking properties for these selected compounds are listed in table 4.

Table-4: Showing the hydrogen-bond information of selected molecules

Molecule Number	Number of Hydrogen Bonding	Amino Acids Involved in Hydrogen Bonding	Hydrogen Bonding Distance in A°
1	3	39CYS,27ASN,28ARG	2.526940,2.902093,2.980656
2	1	27ASN	2.924948
3	2	28ARG, 27ASN	2.957644, 2.716785

The docking energy values for these selected compounds are ranging from -8.97 kcal/mole to -11.70 kcal/mole. Highest docking energy -11.70 kcal/mol is reported by Mol.No. 1. It is also reported that Mol. No. 1 interacts tightly with 3 hydrogen bonds with receptor enzyme, whereas molecule No.2, shows only 1 hydrogen bonding. Molecule No. 3 shows 2 hydrogen bonding. It is reported that **39 Cysteine, 27 Asparagine, 28 Arginine and 26 Valine** are taking active part in making hydrogen bonds with the ligand atoms. The **27 Asparagine and 28 Arginine** are the most prone amino acids to make hydrogen bond. The reported average hydrogen bond distance is 2.5 A° .

To understand the stability of ligand-enzyme complex cluster studies for compounds were also performed.

The cluster analysis helps to understand the conformation of ligand compounds with enzyme in docking site at the time of flexible interactions. Higher the cluster number along with lower docking energy shows the possibilities of the best fitting of ligand and hence higher ligand-enzyme complex stability. Autodock provides a number of cluster values along with possible docking energies. Only three such values along with corresponding docking energies were analyzed and reported in table 5.

Table-5: Cluster details for Organo-Sulfur based compounds with CDK4 mimic CDK2 enzyme.

Molecule Number	Binding Energy (B.E.) ΔG in Kcal/mol/cluster Size					
	I st Highest		II nd Highest		III rd Highest	
	B. E.	Number of Conformation	B. E.	Number of Conformation	B. E.	Number of Conformation
1	-11.70	24	-8.53	6	-9.65	3
2 \sqrt	-9.92	43	-8.23	4	-7.92	3
3	-8.97	17	-6.76	4	-6.94	3

Following figure 1,2, and 3 show the docking images in Wire-frame and CPK mode for Mol. No. 1, 2, and 3 with 2FHI enzyme respectively.

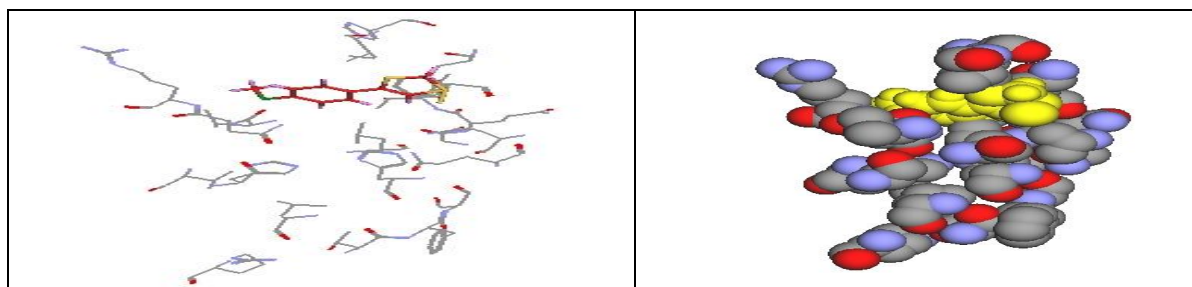


Figure 1. Docking of Anetholtrithione with 2FHI enzyme showing Wire-Frame and CPK mode

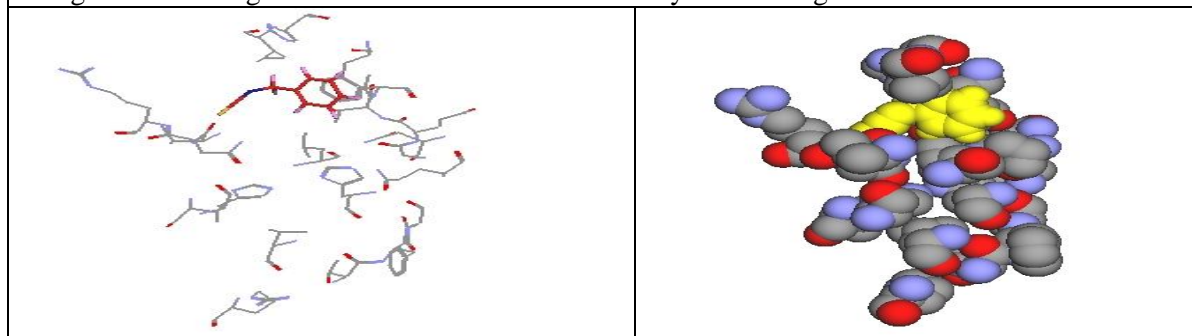


Figure 2. Docking of Benzyl isothiocyanate with 2FHI enzyme showing Wire-Frame and CPK mode

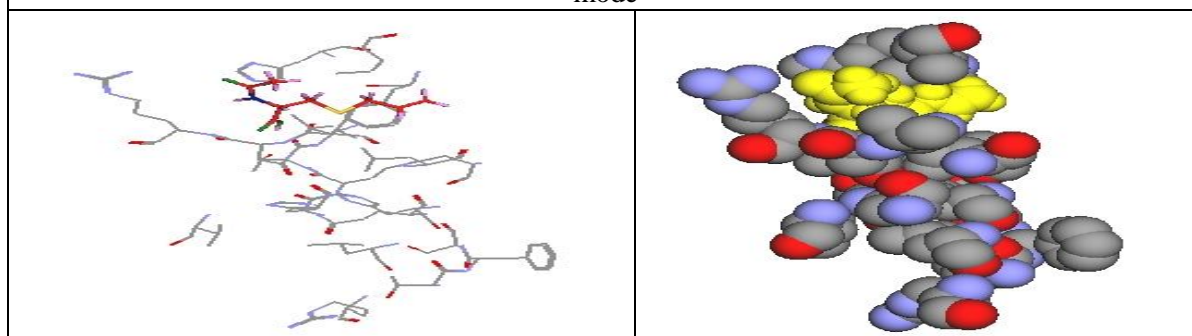


Figure 3. Docking of N-acetyl-S-allylcysteine with 2FHI enzyme showing Wire-Frame and CPK mode

Computational properties like LogP, M.R., Number of Phenyl rings, Number of -OH, -COOH and -CH₂ chains are also calculated using Chem Office. First two properties are directly linked to the drug likeness properties of small molecules, whereas remaining properties are structure parameters. The values of these properties are reported in Table 6.

Table 6. Several computational properties of naturally occurring Organo-Sulfur based compounds.

Molecule Number	Log p	M.R. cm ³ /mol	Phenyl Ring	Hetero-Cyclic Ring	-OH	-COOH	CH ₂ -chain
1	*	*	1	1	*	*	*
2	2.27	45.94	1	*	*	*	1
3	-0.04	51.57	*	*	1	*	2

It is evaluated that all these compounds are showing lower LogP values (less than 5) and Molar refraction index between 45.94 to 51.57 cm³/mol which support the drug likeness properties of selected molecules. The average -OH groups in these ligand is 1 and having no -COOH groups. The presence of -OH group helps in forming hydrogen bonding with an enzyme and hence increases conformational stabilities.

These compounds do have the aliphatic long chain of carbon atoms prompting to have hydrophobic interactions. Also to report that the molecule no. 1 having only one heterocyclic ring though the docking values for each of these molecules are nearly same.

CONCLUSION

Minimum and maximum docking energy of selected compounds with selected enzyme are -8.97003 kcal/mol and -11.7013 kcal/mol respectively.

In this set of molecules, the highest number of cluster is reported by molecule number 2 with docking energy value -9.92 kcal/mol and cluster size is 43. Hence -9.92 Kcal/mol will be more preferred in ligand interactions due to more number of conformations are docked successfully. In this study it is concluded that molecule number 2 is the best and showing the maximum interactions.

It is surely understood that the organo-sulfur compounds are fit into the active site and have interactions with the amino acids due to their small size. Also it is reported that the molecular weight has no place in making molecule as anti-CDK agent.

ACKNOWLEDGMENT

We sincerely acknowledge the fund support by U.G.C, New Delhi. (Research Award Scheme Xth Plan.) To Dr. Sunil H. Ganatra. We would like to thank Dr.B.J. Ghiya, Emeritus Scientist and Ex-Reader, Department of Chemistry, Institute of Science, Nagpur for fruitful scientific discussions.

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A STUDY ON SOCIO-ECONOMIC PROFILE OF MALHAR KOLI TRIBES OF DAHISAR TARFE MANOR

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ABSTRACT

The tribal communities reside in various ecological and geo-climatic conditions ranging from plains and forests to hills and inaccessible areas. Tribal communities are at different stages of socio-economic and educational development. Though now tribal in the villages have adopted a mainstream way of life, still they are the marginalised community. Dahisar Tarfe Manor, village is a tribal dominant village situated in the Palgahr District of Maharashtra. The Malhar Kolis form the majority of the village population beside there are Warlis, Katkaris, OBC and the Muslim Teli. In spite of its nearness to metropolitan city like Mumbai, the tribal here lead a secluded life away from the hustle and bustle of the city. The primary objective of the study is to understand the socio-economic profile of the Malhar Koli in the Dahisar Tarfe Manor village.

Keywords: Tribal, Malhar Koli, Village

INTRODUCTION

The tribal population in India may be small in number but has great diversity in terms of language and culture, ecological settings, physical features, modes of making livelihood, level of development, social stratification etc. Tribal communities are at different stages of socio-economic and educational development. The changes taking place in this society is miserable. They are the most marginalised groups of the society. The primary objective of the study is to understand the socio-economic life of the Malhar Koli in the study area.

The groups identified and enumerated as tribes during British period were reclassified as Schedule Tribes after the constitution was adopted in 1950. Article 342 of the constitution provided for the listing of these groups in the schedule so that they can be given certain socio-economic, educational, administrative and political concessions.

As per the census of 2011 the total population of ST who lived in Maharashtra was 1, 05, 10, 213 constituting 9.35% of the population of the state. The ST are the most deprived and neglected section of the population. The tribal groups of India are divided into five broad regional categories on the basis of socio-economic, ecological, political and administrative and ethnic factors:

1. Himalayan Region: It is consisting of three sub regions north-eastern Himalayan region, central Himalayan Region and North-Western Himalayan region.
2. Middle Region: It constitutes of 55 % of the tribal population in the states of Bihar, Jharkhand, West Bengal, Odisha and MP.
3. Western Region: It includes states of Gujarat, Rajasthan, Maharashtra, Goa and Dadra and Nagar Haveli.
4. Southern Region: It comprises the states of Andhra Pradesh, Karnataka, Tamil Nadu and Kerala.
5. Island Region: It includes Andaman and Nicobar in the Bay of Bengal and Lakshadweep in the Arabian Sea.

LITERATURE REVIEW

1. Mundhe E.S. (2017), "A Study of Socio-Economic Status of Thakur Tribal Women in Thane District, Maharashtra" undertook comparative study of women in different societies. As the nature of society differs so does the condition of women. The socio-economic condition of women plays an important role in individual as well as community life. The tribal women constitute half of the total population. The paper analysis the socio-economic status of women in Thakur tribe. In comparison to men, women tribal folk work more. Role of women is not restricted to economic activities but also to non-economic activities. Tribal women are hardworking than the men. The tribal women in their own world enjoy freedom and self-expressive in nature. Due to modernization many socio-economic changes are taking place in tribal community, but the tribal women still remain traditional in their style of dressing, long, tools etc. The impact of modernization is different on both men and women.
2. Lal S. and Devanna S. (2016), "Socio-Economic Development of Primitive Tribes: An Empirical Study in Adilabad District" reveals that India has largest tribal community just next to Africa. The paper analysis the development of the tribes in this region and there literacy level. Majority of them are married. Their major

occupation is cultivation and some of them possess below five acres of dry land. Majority of the tribal work as labour in the others land for 25days in a month. Basically the tribal are unskilled workers. Many of them follow the single cropping method. Nearly 87% of the tribal are earning income which is less than 500 rupees per month.

3. Nisha R. and Asokhan M. (2015), "Empowerment of Tribal Women through Livelihood Development" discuss the role of tribal women in the economic development as these women contribute in various economic activities and one of them is education. The paper discuss the main reason for the exploitation of the schedule tribe is indebtedness. There is existence of legal measures like debt relief to protect the tribal people, but the enforcement is ineffective. The tribal people are becoming easy victims of money lenders and thus becoming dependent on money lenders. The author aims to study the profile of the tribal women and analyse their socio-personal, socio-psychological and socio-economic features, and their level of participation.

METHODOLOGY

The present study aims to investigate the socio-economic profile of the Malhar Koli tribes from the study area. The study is based on both primary and secondary data. The current study is a quantitative study. The primary data consists of various responses gathered through survey.

The secondary data is collected from various reports, e-books, books, journals and research papers. The primary objective of the study is to understand the socio-economic profile of the Malhar Koli in the Dahisar Tarfe Manor village.

PROFILE OF THE STUDY AREA

Dahisar T Manor Village belongs to newly formed Palghar District of Maharashtra. It is located 45 km from Palghar, 125 km from Thane and 80 km from state capital Mumbai. 31% of the village is covered by forest. Towards its South it is surrounded by Virarand Nallasopara Taluka, and Vikramgad and Wada Taluka towards its East. It has nearly 606 households with total population of 2557 (Male population 1267 and Female 1290) comprising 408.510 hectares of land. Female constitutes 50.4% of the population and males form the 49.6% of the total population. 14% of the population belongs to 0 to 6 years of age constituting 50% girls and 50% boys. The village shows a positive sex ratio indicating a healthy growth rate among female to male population. The scheduled caste and scheduled tribes show positive trend towards female to male ratio. However male literacy rate is higher than the female. 39% of the total population is from the general caste, 3% belong to scheduled caste and 58% of the population is scheduled tribes comprising Warli, Malhar Kolis and Katkari. On an average 4 persons live in the household.

WHO ARE TRIBAL?

A tribe is viewed, historically, as a social group that existed before the development of nation state or outside them. A tribe is a group of distinct people, dependent on their land for their livelihood, who are largely self-sufficient, and not integrated into the national society. Article 366(25) of the constitution of India define Schedule Tribes as those people or communities, who are scheduled as per the Article 342 of the Constitution of India.

The tribes possess following characteristics as per Lokur Committee:

- Indication of primitive traits
- Distinctive culture
- Shyness of contact with the non-tribals
- Isolated and Backward

WHO ARE MALHAR KOLI?

The Malhar Koli tribes are found in many parts of the country like Hyderabad, Indore, Balaghat, Mumbai etc. Malhar Koli worship the God Malhar also called as 'Panbhari' or 'Water Filling' kolis. As they are follower of Panbhari therefore they are also known as 'Panbari Kolis'. They are considered one of the purest and most respectable of all the koli tribes. In comparison to other tribes they are more developed. In some villages they are working in the government sector jobs. Malhar Koli reside in Thane, Mumbai and in different parts of Maharashtra. In Ahmadnagar district, they do cultivation, whereas in Maratha period they protectors of forts.

As the name water filler shows, their calling is to supply villager as well as the strangers with the water and to clean the villages, rest-house and even offices. At the time of Maratha rule in South Pune, Malhar Koli's were the hereditary guardians of the hill forts of Purandhar, Sinhgad, Torne etc.

RESULT AND DISCUSSION

I. Demographic Profile:

Tribe	No. of Respondents
Katkari	17
Mahar	08
Malhar Koli	58
Muslim Teli	07
Warli	10

Above table gives the detail of composition of tribe of the village. Majority of them that is 58 belong to the Malhar Koli, while 10 belongs to Warli, 17 are from Katkari, 7 are Muslim Teli and 8 are Mahar respondents.

II. SOCIAL PROFILE

1. Daily meal pattern-Early morning:

Early morning diet	No. of Respondents
Black Tea	74
Black Tea, Chapatti	21
Tea, Khari, Toast	05

This table deals with the food pattern of the villagers. Table shows the early morning eating habits of the villagers. Majority of them that is 74 respondents drink only black tea in the morning, 21 respondents drink black tea and with it they eat chapatti. While 5 respondents drink black tea along with Khari and Toast.

2. Is there any doctor in your village?

Is there any doctor in your village	No. of Respondents
Yes	98
No	02

In this table 98 respondents said they have doctor available while 2 respondents said doctor availability is not there in the village.

3. When you experience a health, problem which health facility d you go:

Health facility	No. of Respondents
Doctor	98
Tantric	02

98 respondents said that prefer to go to doctor than going to the tantric when they fall sick while 2 respondents said they prefer going to tantric when they fall sick.

4. Do you have caste system?

Do you have caste system	No. of Respondents
Yes	05
No	95

In the above table 95 respondents said in their village they don't follow caste system and just 5 respondents said there exist caste system in the village

III. ECONOMIC PROFILE**1. Land Use and Agriculture**

	No. of Respondents	
	Yes	No
Do you do farming or any of your family member involve in farming?	94	6
Do you own land or work in someone else land?	94	6
Do you depend on agricultural income only?	89	11

Above table gives information about the occupation of the respondents. Out of 100 respondents, 94 respondents either themselves or some of their family members were involved in the farming and 6 respondents said they or their family members are not involved in farming they work in factories, companies or as a driver on trucks.

94 respondents own land and 6 respondents work in someone else land. 89 respondents depend on agriculture income while 11 respondents do not depend on agriculture income.

2. Size of Land Holding:

Category	No. of farmers
Landless	6
Marginal	60
Small	21
Medium	13

Table shows size of land holding of the respondents. 6 respondents are landless, 60 respondents got marginal size of land while 21 respondents possess small size of land and 13 respondents owned medium size land.

3. How the agricultural production in last 5 years is?

Change	No. of Respondents
Increased	54
Decreased	28
Did not change	18

Table reflects agricultural production in last five years. According to 54 respondents agriculture production has increased in last five years, 28 respondents felt it has decreased and 18 respondents feel that agriculture production has not changed it is same.

4. What is the average monthly income of the household?

Average monthly income of the household (Rs)	No. of Respondents
Below 10000	29
10000 – 20000	34
20000 – 30000	29
30000 – 40000	05
Above 40000	03

This table shows monthly income of the household. 29 respondents earn below 10,000, while 34 respondents earn 10,000 to 20,000, 29 of the respondents earn 20,000 to 30,000, 5 respondents earn 30,000 to 40,000 and 3 respondents earn above 40,000.

5. How much do you save yearly/monthly?

Monthly/Yearly saving (Rs.)	No. of Respondents
500 – 1000	17
1000 – 2000	54
2000 – 3000	10
Above 3000	03
Nil	16

This table reflects the saving pattern of the respondents of the village. Out of 100, 17 respondents save between 500 to 1000 rupees monthly, 54 respondents save between 1000 to 2000 monthly, 10 respondents save 2000 to 3000 monthly, while 3 respondents said they are able to save 3000 and above and 16 respondents said are not able to save anything.

6. Do you have any bank account?

Do you have any bank account	No. of Respondents
Yes	81
No	19

According to this table 81 respondents have their accounts in the bank and 19 respondents don't have their bank account.

7. Do you have freedom to use money as you wish?

Do you have freedom to use money as you wish	No. of Respondents
Yes	76
No	24

This table show whether the respondents enjoy freedom to use their money. 76 respondents said they have freedom to use money as they wish and 24 respondents said they don't enjoy such freedom.

RESULT AND DISCUSSION

The village Dahisar Tarfe Manor is a tribal dominant village consisting of tribes such Malhar Koli, Warli, Katkari. Despite being near to metropolitan city like Mumbai, tribal from the village lead secluded life. The Malhar Koli compared to Warli and Katkari do fairly well in terms of Human Development Index. Most of them reside in pucca houses which are well ventilated, electrified and have access to piped water supply. Their produce are sold in the local market. Some of them are landless, therefore work in nearby plastic factories. Women from this community are hardworking they work in farm and manage household single handily. There are women headed household who are farmers. Literacy level is higher, their children travel to neighbouring cities for higher education. However parents are reluctant to send girls for higher education due to long distance between their village and college. The younger generation are aware of the importance of education and are sending even their daughters to hostels in Pune as well as in Mumbai and Navi Mumbai for schooling and nursing courses.

In this village caste system does not exist. Although this village is close to Mumbai and having access to TV still they eat their traditional food, though small children are attracted to fast food life due to availability of maggi and Chinese noodles etc.,

Many of the families in the village have dual source of income that is some members of the family work on the land and young generation work in factories, as carpenters and nurse. Due to their better economic position the Malhar Kolis as a community show hope of positive change in terms of education and employment although they prefer to stay in their village and do not wish to migrate to cities like Thane and Mumbai.

CONCLUSION

The socio-economic condition of Malhar Koli from the study area is better the other tribal communities such as the Warli and the Katkari. They are socially, economically and politically aware community. Female sex ratio is far better than the national average, no prevalent of dowry system, female infanticide and foeticide. Only alcoholism is challenging issue amongst the tribal men due to which there are cases of women getting widow in an early age. But there is practice of women remarriage. Tribal farmers from the study area follow traditional method of farming. Although the village is not much developed but it is well managed with all the basic amenities in place.

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