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of Management &  
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Two days National Seminar  
on  
**Competitive Strategies  
&  
it's Excellence in Diversified Sectors**

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Wagholi, Pune**

22<sup>nd</sup> & 23<sup>rd</sup> February 2019

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“The theme has contemporary relevance as the world of business is constantly growing, changing, adapting and modifying. As organizations respond to changes in their markets and develop new business models, their definitions of excellence also change. The seminar will help to understand the various competitive strategies adopted by businesses to respond to the changes in the markets and uncover unique strategies to take their organizations to the next level.

This seminar is being jointly organized under the aegis of Quality Improvement Programme of Savitribai Phule Pune University and by JSPM's Kautilya Institute of Management & Research, Wagholi, Pune. This Seminar spans for two days. The seminar will focus on discussions by the experts from industry and academicians on competitive business strategies and their relevance in the current changing business scenario as well as presentation of research papers by the participants.

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**A STUDY ON POTENTIAL ENHANCEMENT & REWARD SCHEME (PERS) OF TATA MOTORS, PUNE****Prof. Lambodar Saha<sup>1</sup> and Dr. Hrishikesh Dilip Patil<sup>2</sup>**Assistant Professor<sup>1</sup> and Director<sup>2</sup> & Professor, JSPM's Kautilya Institute of Management & Research, Pune**ABSTRACT**

*Potential Enhancement & Reward Scheme (PERS) is a scheme implemented by TATA MOTORS to appreciate and reward the Team members & Associates who enhance their skills or acquired additional skills, the TELCO Employees Union & the Management have reached an agreement regarding the Skill (S), Versatility (V) & Cross Versatility (CV) Rewards known as Potential Enhancement & Reward Scheme (PERS) for all the Team Members & Associates of CAR PLANT. The Management & Telco Employees Union recognize the need to have a scheme for the Team Members / Associates to maintain higher level of motivation of the workforce & to give monetary rewards to them. Therefore, this scheme has been jointly worked out to fulfill the developmental aspiration of the Team Members. All the eligible team Members/Associates can participate and take advantage of the PERS.*

*The versatility rewards are paid to the Team Member / Associates every time they pass a test of another trade but in the skill level equivalent to the one in which they are already placed. On successful completion of the tests, the Associate would be eligible for 3 increments towards Performance Reward. It is essential that the applicant must have adequate theoretical as well as practical / working knowledge of the level applied for Performance Reward test. The objectives of the research are to collect information, understand the significance and opinion of TM grade employees about PERS. Also to understand the procedure and design of Rewards & Recognition Scheme practiced in the Industry. The Scopes of the Study is to create a pool of multi-skilled team members to fulfill their developmental aspirations & company's requirement in future.*

*Keywords: Rewards; Benefits; Process; Information; Enthusiasm; Ability; Qualifying; PERS Test & Opinion.*

**1. INTRODUCTION**

Potential Enhancement & Reward Scheme (PERS) is a scheme implemented by TATA MOTORS to appreciate and reward the Team members & Associates who enhance their skills or acquired additional skills, the TELCO Employees Union & the Management have reached an agreement regarding the Skill (S), Versatility (V) & Cross Versatility (CV) Rewards known as Potential Enhancement & Reward Scheme (PERS) for all the Team Members & Associates of CAR PLANT. The Management & Telco Employees Union recognize the need to have a scheme for the Team Members / Associates to maintain higher level of motivation of the workforce & to give monetary rewards to them. Therefore, this scheme has been jointly worked out to fulfill the developmental aspiration of the Team Members. All the eligible team Members/Associates can participate and take advantage of the PERS.

The rewards to the successful candidates are made applicable from last year. The skill rewards are paid to the Team Member / Associates every time they pass the test for the next higher skill level of his trade. The versatility rewards are paid to the Team Member / Associates every time they pass a test of another trade but in the skill level equivalent to the one in which they are already placed. However this reward is available only once in that trade. On successful completion of the tests, the Associate would be eligible for 3 increments towards Performance Reward.

As per the scheme, the Associate at this initiative would appear for a set of Tests of one level higher in his own function for Performance Reward. If the Associate is successful in the set of tests, he would be rewarded monetarily for enhancement of his potential. The company would utilize his acquired skill for higher level or newer skill as per its requirements.

**2. BACKGROUND**

The tests for PERS are conducted only once in a year in the month of June-July-August. It is essential that the applicant must have adequate theoretical as well as practical / working knowledge of trade applied for Skill / Versatility / Cross Versatility Reward test. Application should be for one reward at a time. The Versatility, Cross Versatility Reward could be availed only once in a given trade. The skill levels for various trades and team member as per is trade can reach only up to stipulate skill levels by undergoing the test and procedures successfully. Those applying for Skill / Versatility / Cross Versatility Reward in Electrical / Electronic tester trade must possess a valid wireman's license or equivalent documents. The same should be produce latest by the time of giving his practical test. The candidates who do not appear for written test / practical test / oral test as

per the schedule given or fails in the test will be declared 'Unsuccessful.' They can appear for the set of tests next year only.

The tests for Performance Enhancement Reward Scheme (PERS) would be conducted only once in a year in the months of June-July-August. It is essential that the applicant must have adequate theoretical as well as practical / working knowledge of the level applied for Performance Reward test. The candidates, who do not appear for written test & Interview as per the schedule given or fail in the tests, will be declared 'Unsuccessful'. They can appear for the set of tests next year only.

### **3. OBJECTIVES OF THE RESEARCH**

**The project was undertaken with the following main objectives in mind**

1. To collect information regarding "PERS".
2. To understand the significance of the PERS.
3. To have an opinion of TM grade employees about PERS.
4. To study the awareness about PERS among employees.
5. To critically evaluate the PERS process.
6. To analyze & interpret the technical methods of PERS.
7. To understand the procedure and design of Rewards & Recognition Scheme practiced in the Industry.

### **4. SCOPES OF THE STUDY**

To create a pool of multi-skilled team members to fulfill their developmental aspirations & company's requirement in future. To develop employees into future promotions and allocating rewards. To provide employees with a better understanding of their role and responsibilities.

### **5. TATA MOTORS PROFILE**



Established in 1945, Tata Motors is India's largest and only fully integrated automobile company. Tata Motors began manufacturing commercial vehicles in 1954 with a 15-year collaboration agreement with Daimler Benz of Germany. Since 1969, the company's products have come out of its own design and development efforts.

Today, Tata Motors is India's largest commercial vehicle manufacturer with a 59-per cent market share and ranks among the top six manufacturers of medium and heavy commercial vehicles in the world.

### **6. PROFILE OF PASSENGER CAR BUSINESS UNIT (PCBU)**

The Company's passenger car range comprises the hatchback Indica, the Indigo sedan and the Marina, its station wagon variant, in petrol and diesel versions. The Tata Sumo, its rural variant, the Spacio and the Tata Safari (the country's first sports utility vehicle) are the company's multi-utility offerings. The Tata Indica, India's first indigenously designed and manufactured car, was launched by Tata Motors in 1999 as part of its ongoing effort towards giving India transport solutions that were designed for Indian conditions. Currently, the company's passenger cars and multi-utility vehicles have a 16-percent market share.

In addition to the growth opportunities in the buoyant domestic market, the company is pursuing growth through acquisitions and alliances it has entered into a tie-up with MG Rover, UK, to supply 1, 00,000 Indicas to be badged as City Rover other geographies.

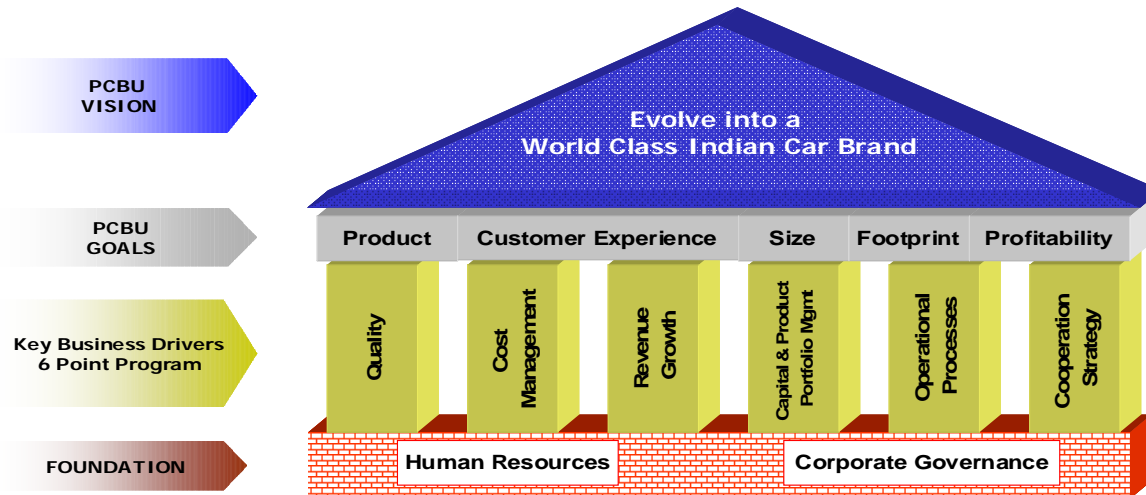
Over the years, this division has developed expertise in design and manufacture of automated dies, fixtures and welding equipment. Its large design group is fully conversant with state-of-the-art CAD facilities and manufacturing facilities comprising of light and heavy CNC machine shops, jigs boring room, plastic template shop, wood pattern and model pattern shop, five axis precision machine tools and laser control machines. To cope with such a diverse range, four assembly lines have been established, one each for MCVs and HCVs, LCVs, Utility vehicles and one for Passenger Cars (Indica and Indigo).

The Passenger Car Division in 'K' block executes the entire process of car manufacture over five shops - the engine shop, the transmission shop, press and body shops, paint shop and the trim and final assembly shop. The shops are fully automated ensuring that there is minimal chance for error in the manufacturing processes. After

the car is completely assembled, it goes through several checks like wheel alignment, sideslip test, break test, shower test, and a short test run before it is ready for dispatch. All systems such as materials management, maintenance and other activities are computerized, enabling smooth operations and minimum inventory needs.

The Electronics Division is engaged in the production of a wide variety of Machine Tool Controllers, PLCs, and Test rig instrumentation, Servomotors, Proximity Switches. In addition, it has developed a number of components such as flashers, horns, timers that are used in Tata Motors' vehicles. Industry experts rate the fully automated Foundries at Chinchwad and Maval among the best, worldwide.

**7. PCBU KEY BUSINESS DRIVERS– STRATEGY**



**8. PROCESSES**

- Agencies for certifying eligibility criteria: Eligibility norms to be followed as per the rules and eligibility criteria.
- HR establishment will maintain the data base regarding Skill / Versatility / Cross Versatility attained by the employee.
- The test specifications are prepared by the Productivity Services Department in consultation with shop for various level of each process in all Shop. These will be used as guideline by the concern department for assessing Skill of the employee. Skill level and work station relationship would be worked out by Productivity Services Department preferably with in a period of one month form the signing of these settlements and would form a part of this settlement.
- The concerned Shop in co-ordination with Productivity services and training department would conduct the Practical and Oral tests to assess the job knowledge based on the accepted application of the employee and as per the guideline set for this purpose. The concern shop will also certify the performance (Quality & Quantity) of the employee during the practical test and maintain records in the specific format.
- Trade after Versatility, Cross Versatility Reward: The basic trade of the employee would be maintained in the company records. However, when the employee successfully receive the Versatility ,Cross Versatility Rewards the data base indicate only the basic trade and the trades along with the dates will be indicated for his achievement through Versatility ,Cross Versatility systems.
- The present system of designations would remain unaffected by the trade skills acquired by the Team Members.

**9. RESEARCH METHODOLOGY**

Appropriate research methodology was devised for attainment of derived objectives, through personal interaction with the employees and through various secondary sources. So as per the requirement I used Analytical Research Methodology for taking result out of this research.

After a discussion with concerned Manager & HR. It was decided to select all respondents TM 1 to TM 5 Grade employees from all the shops. Total no. of respondents are 60. The area of research was decided as above the TM 1 Grade level. And who have minimum 3yrs experience with TML because these TM's are aware about the company policies & schemes e.g. PERS. Their opinion is valuable because these TM grade employees are working in the company & observing the system since last 3yrs or more.

**9.1 Primary Data**

- Structured interviews with employees above TM 1 grade.
- Unstructured interviews with employees of HR Dept.

**9.2 Secondary Data**

- Annual Report of HR Dept. on PERS: To get the detail information about PERS.
- Internet: For collecting the general information of TATA MOTORS Ltd. i.e. History, Profile of the company.

**9.3 Tools for the Data Collection**

Research was conducted using the tool through Questionnaire and Unstructured Interviews. Questionnaire is targeted to answer followings –

1. Awareness of PERS (Process, Benefits, Rules& Regulations) among employees.
2. Enthusiasm of employees
3. Consulting with supervisors
4. Willingness of TM’s about PERS
5. Ability to work
6. PERS Test.
7. PERS Qualifying Conditions.
8. Opinions
9. Benefits to the company
10. Benefits out of PERS
11. PERS Process.

**9.4 Sample Size:** 60 TM Grade employees are taken as a sample for collection of data.

**9.5 Limitations of the Study**

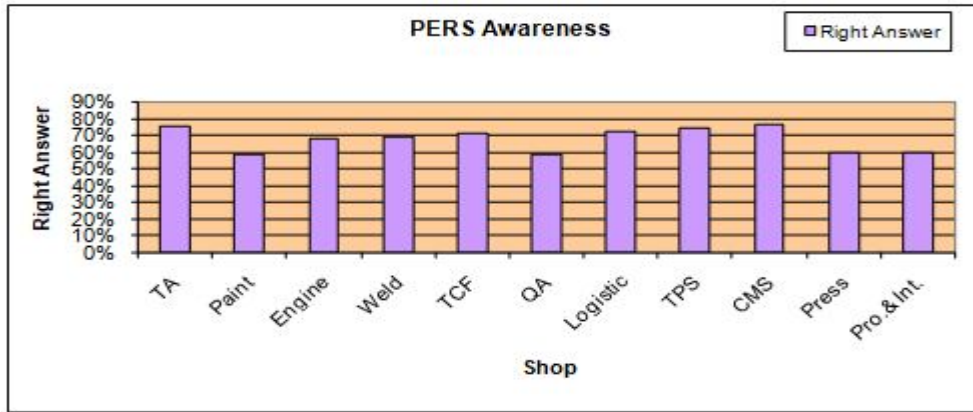
- It is very difficult to know the validity of knowledge – skill of employees about PERS.
- It has large scope for study.
- Every time we can’t directly interact TM’s.

**10. RESULT AND DISCUSSIONS**

**10.1 Shop wise Response about “PERS”**

**Awareness about PERS**

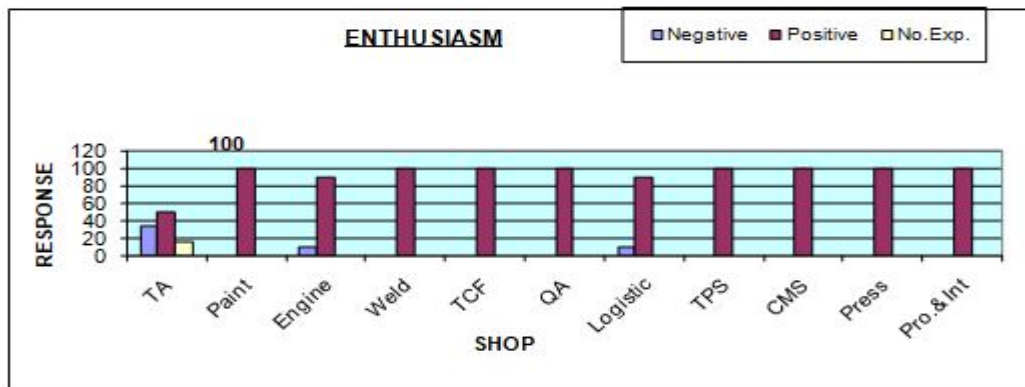
Sr. No.	Shop	Right Answer
1	TA	75%
2	Paint	58.57%
3	Engine	68%
4	Weld	68.57%
5	TCF	71.25%
6	QA	58.33%
7	Logistic	72%
8	TPS	74%
9	CMS	76.66%
10	Press	60%
11	Pro.& Int.	60%
		742%
	Aggregate	67%



Aggregate percentages (67%) of respondents are aware about PERS rules, benefits, process etc. According to above feedback we can say, they have knowledge about this scheme.

**Enthusiasm of Employees towards PERS**

Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	33.3	50	16.7
2	Paint	0	100	0
3	Engine	10	90	0
4	Weld	0	100	0
5	TCF	0	100	0
6	QA	0	100	0
7	Logistic	10	90	0
8	TPS	0	100	0
9	CMS	0	100	0
10	Press	0	100	0
11	Pro.& Int	0	100	0
		53.3	1030	16.7
	Aggregate	4.85	93.64	1.52



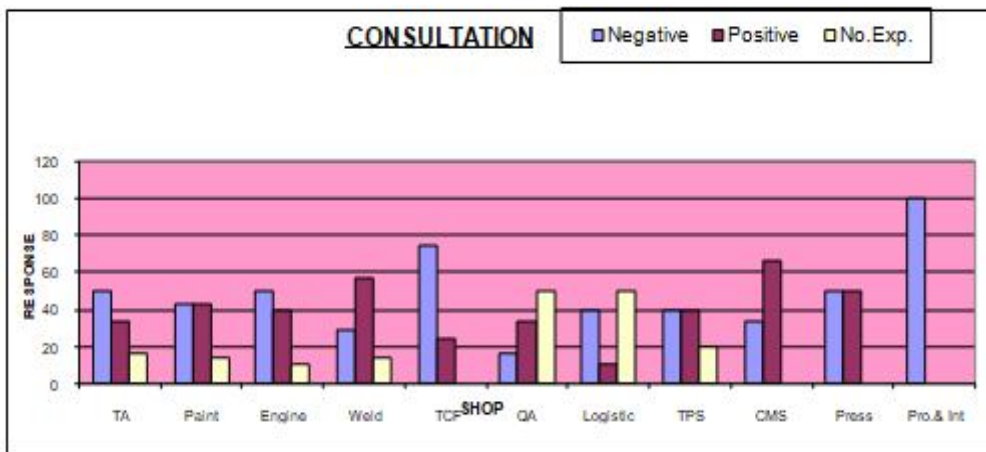
93.64% (aggregate) respondents are agree with, the employees are enthusiastic for applying to PERS. In 8 shops respondents are fully (100%) agree about willingness of employees. Only from TA 33.3% respondents gave negative response in respect of employees enthusiasm.

**Consulting with supervisors**

Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	50	33.3	16.7
2	Paint	42.86	42.85	14.29
3	Engine	50	40	10
4	Weld	28.57	57.14	14.29
5	TCF	75	25	0
6	QA	16.67	33.33	50
7	Logistic	40	10	50



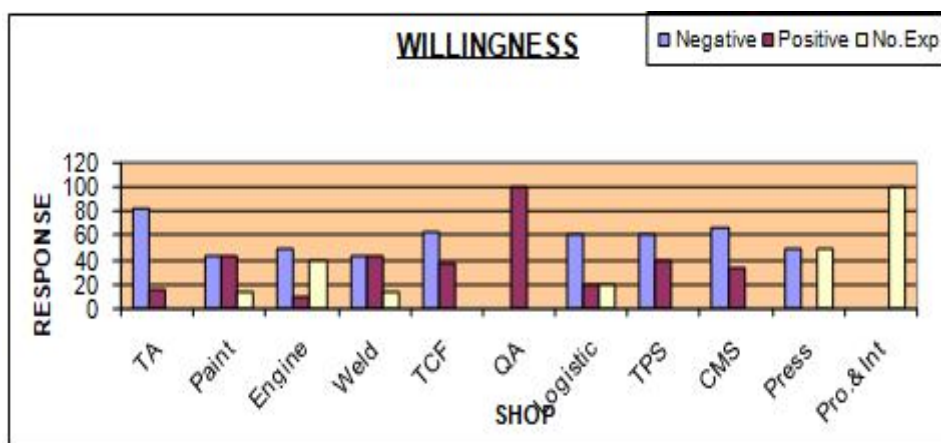
8	TPS	40	40	20
9	CMS	33.33	66.67	0
10	Press	50	50	0
11	Pro.& Int	100	0	0
		526.43	398.29	175.28
	Aggregate	47.86	36.21	15.93



From all shops 47.86% respondents think, team members are not consulting with them before applying for PERS & only 36.21% are agree about consultation of team members with TM grade employees. From CMS 66.67% respondents are agree.

**Willingness of TM's**

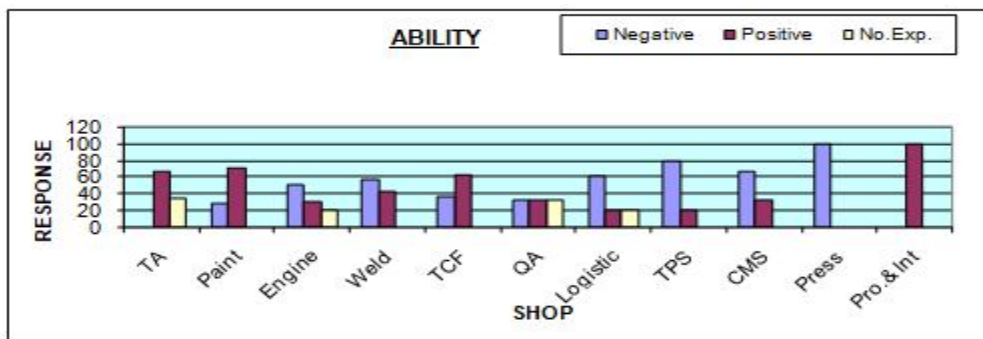
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	83.5	16.7	0
2	Paint	42.86	42.85	14.29
3	Engine	50	10	40
4	Weld	42.86	42.86	14.29
5	TCF	62.5	37.5	0
6	QA	0	100	0
7	Logistic	60	20	20
8	TPS	60	40	0
9	CMS	66.67	33.33	0
10	Press	50	0	50
11	Pro.& Int	0	0	100
		518.39	343.24	238.58
	Aggregate	47.13	31.20	21.69



From all shops 47.13% (aggregate) people think that the team members are not willing to work other dept. after getting PERS benefits. Only 31.20% respondents are agree about willingness of TM's. According to this response we can say that the TM's are not so happy to work other dept.

Ability to Work

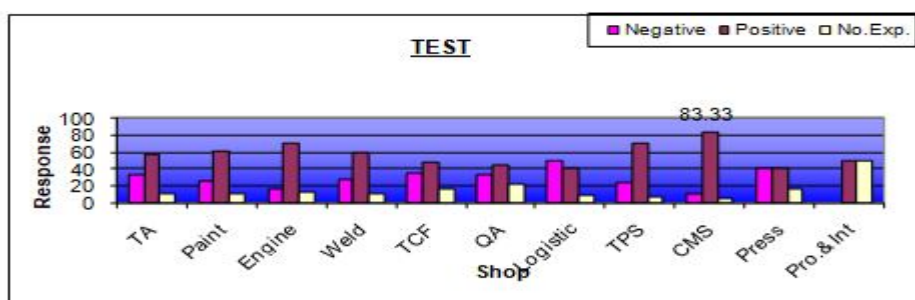
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	0	66.7	33.7
2	Paint	28.57	71.43	0
3	Engine	50	30	20
4	Weld	57.14	42.86	0
5	TCF	37.5	62.5	0
6	QA	33.33	33.33	33.33
7	Logistic	60	20	20
8	TPS	80	20	0
9	CMS	66.67	33.33	0
10	Press	100	0	0
11	Pro.& Int	0	100	0
		513.21	480.15	107.03
	Aggregate	46.66	43.65	9.73



43.65% respondents are agree with the TM’s higher level of ability at work. From Paint shop 71.43% & from Pro. & Int. 100% respondents agree with the ability of TM’s. But on other side 46.66% respondents say that the TM’s are not using their higher level of ability at work & also in Press shop all respondents are 100% D’agree with their ability at work.

Test

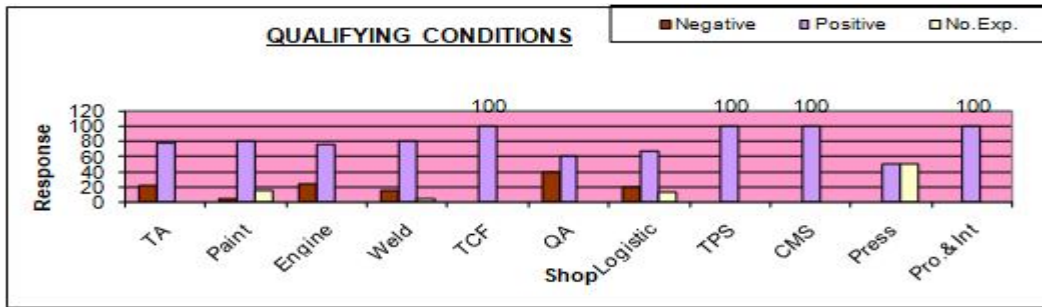
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	33.55	58.33	11.11
2	Paint	26.19	61.9	11.9
3	Engine	16.66	70	13.33
4	Weld	28.57	59.52	11.9
5	TCF	35.41	47.91	16.66
6	QA	33.33	44.44	22.22
7	Logistic	50	40	10
8	TPS	23.33	70	6.66
9	CMS	11.11	<b>83.33</b>	5.55
10	Press	41.66	41.66	16.66
11	Pro.& Int	0	50	50
		<b>299.81</b>	<b>627.09</b>	<b>175.99</b>
	Aggregate	<b>27.25</b>	<b>57</b>	<b>15.99</b>



Above 50% respondents are positive about PERS Test & the way of manner in which the tests are conducted. It means written test, Practical test of PERS is in the favor of team members.

**Qualifying conditions**

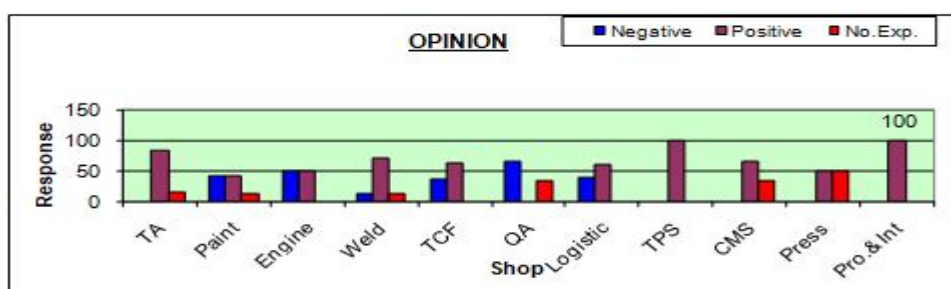
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	22.22	77.77	0
2	Paint	4.76	80.95	14.28
3	Engine	23.33	76.66	0
4	Weld	14.28	80.95	4.76
5	TCF	0	100	0
6	QA	38.88	61.11	0
7	Logistic	20	66.66	13.33
8	TPS	0	100	0
9	CMS	0	100	0
10	Press	0	50	50
11	Pro. & Int	0	100	0
		123.47	894.1	82.37
	Aggregate	11.22	81.18	7.48



81.18% respondents are positive about PERS Qualifying Conditions. As per the response, they strongly stress on this, the PERS process should have Qualifying Conditions in the area of Attendance, Discipline, and SQDCM score. From TCF, TPS, CMS & Pro. & Int. 100% respondents are agree with Qualifying Conditions.

**Opinion**

Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	0	83.33	16.67
2	Paint	42.86	42.86	14.29
3	Engine	50	50	0
4	Weld	14.29	71.43	14.29
5	TCF	37.5	62.5	0
6	QA	66.67	0	33.33
7	Logistic	40	60	0
8	TPS	0	100	0
9	CMS	0	66.67	33.33
10	Press	0	50	50
11	Pro. & Int	0	100	0
		251.32	686.79	161.91
	Aggregate	22.85	62.44	14.72



62.44% respondents are in the favor that the PERS process is better to run by company itself. 22.85% respondents do not agree with this point. They think it will better to contract out running of PERS to an out side agency.

**Benefits to the Company**

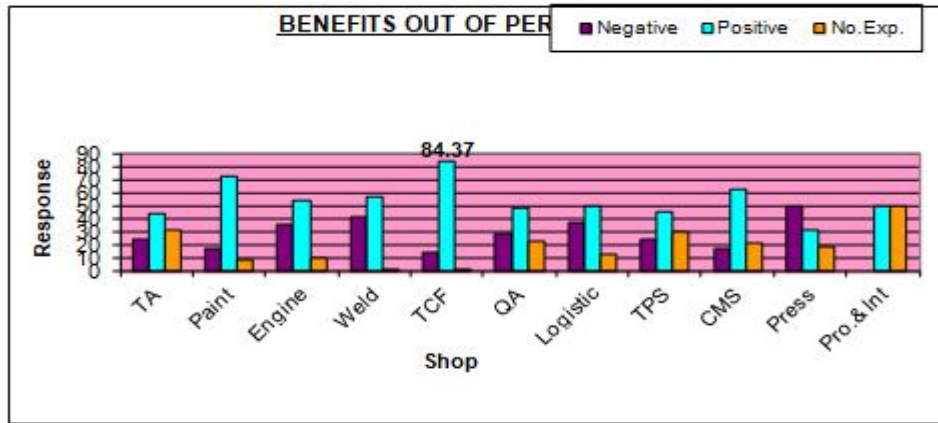
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	0	66.67	33.333
2	Paint	0	57.14	42.86
3	Engine	40	50	10
4	Weld	28.57	57.14	14.29
5	TCF	0	100	0
6	QA	16.67	66.67	16.67
7	Logistic	0	100	0
8	TPS	40	60	0
9	CMS	0	100	0
10	Press	0	50	50
11	Pro. & Int	0	100	0
		125.24	807.62	167.153
	Aggregate	11.39	73.42	15.20



73.42% respondents are strongly agreed about PERS benefits to the company. In TCF, Logistic, CMS, Pro. & Int. respondents are 100% positive about PERS benefits. Only 11.39% are having negative opinion about this point.

**Benefits out of PERS**

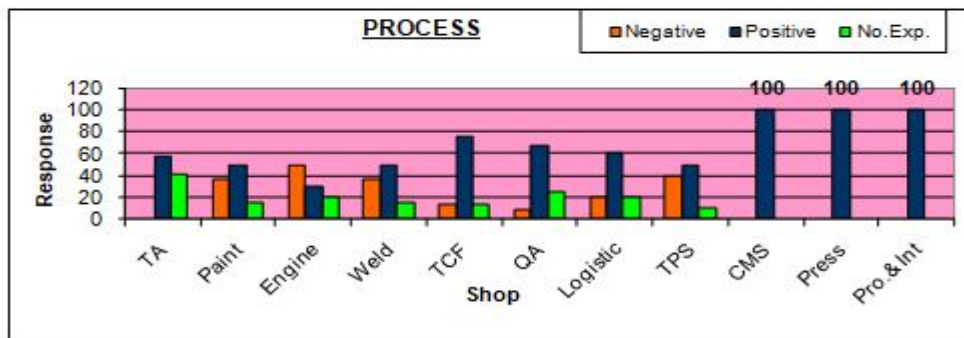
Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	25	43.75	31.25
2	Paint	17.85	73.21	8.92
3	Engine	36.25	53.75	10
4	Weld	41.07	57.14	1.78
5	TCF	14.06	84.37	1.56
6	QA	29.16	47.97	22.91
7	Logistic	37.5	50	12.5
8	TPS	25	45	30
9	CMS	16.66	62.5	20.83
10	Press	50	31.25	18.37
11	Pro.& Int	0	50	50
		292.55	598.94	208.12
	Aggregate	26.59	54.44	18.92



54.44% (aggregate) respondents are agree about benefits out of PERS. Company as well as TM’s are taking benefits out of this scheme by motivating them in manner of increments & if the TM’s are keen, enthusiastic then it’s always increase production of the company. Only 26.59% respondents are d’agree.

**Process**

Sr. No.	Shop	Negative	Positive	No. Exp.
1	TA	0	58.33	41.66
2	Paint	35.71	50	14.28
3	Engine	50	30	20
4	Weld	35.71	50	14.28
5	TCF	12.5	75	12.5
6	QA	8.33	66.66	25
7	Logistic	20	60	20
8	TPS	40	50	10
9	CMS	0	100	0
10	Press	0	100	0
11	Pro.& Int	0	100	0
		202.25	739.99	157.72
	Aggregate	18.38	62.27	14.33

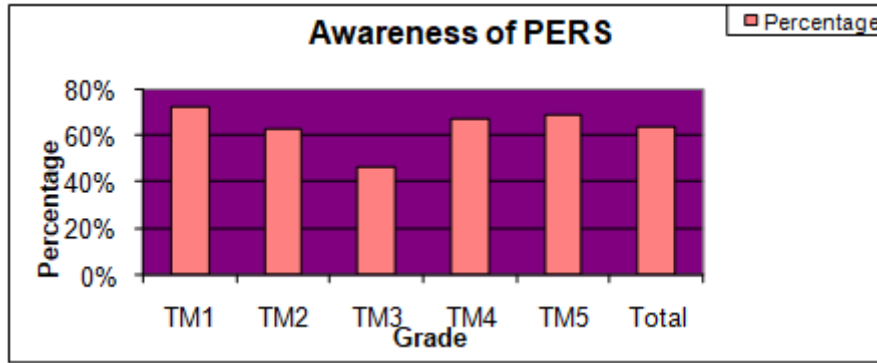


62.27% (aggregate) respondents are positive about PERS Process. They strongly agree with that the entire PERS process is very transparent, driven by policies & beyond any influence. In CMS, Press, Pro. & Int. respondents are 100% agree with the PERS Process. Only 18.38% are d’agree about the PERS process.

**10.2 Grade wise Response about “PERS” (from TM 1 to TM 5 grade)**

**Awareness about PERS**

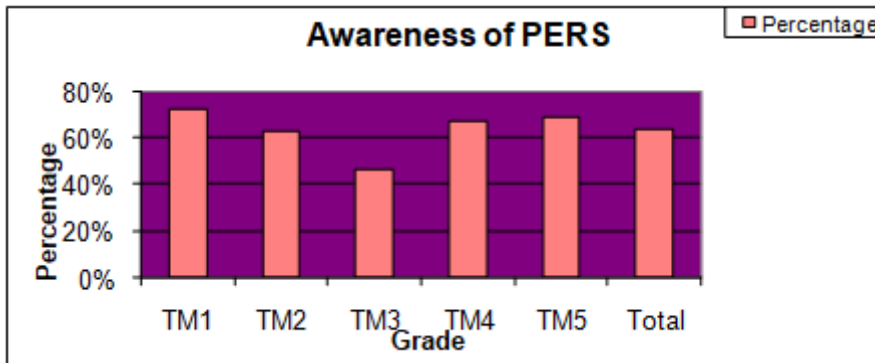
Sr. No.	Grade	Percentage	Right Ans	Total Ans
1	TM1	73%	87	120
2	TM2	62.66%	94	150
3	TM3	46.66%	56	120
4	TM4	67.50%	81	120
5	TM5	69%	69	100
	Total	63.44%	387	610



TM 1 grade respondents are more aware about the PERS. But it doesn't mean that others not. Maximum above 60% are aware about this scheme. 63.44% respondents are given right answers.

**Enthusiasm of Employees towards PERS**

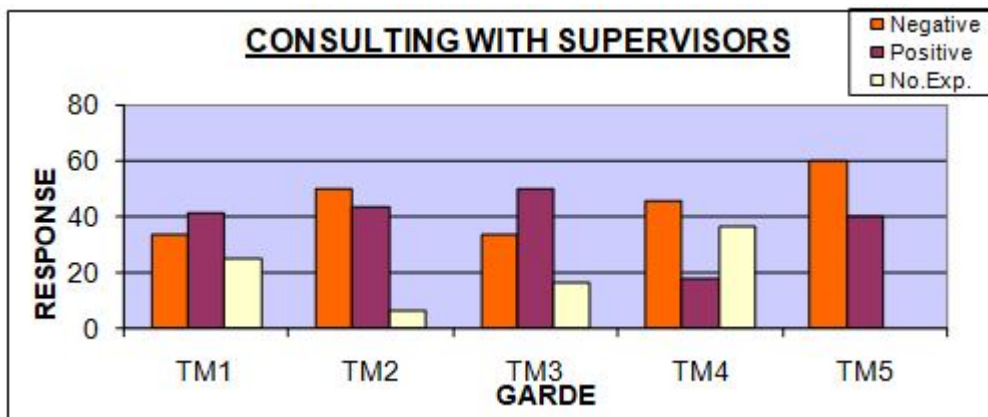
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	0	13.33	8.33	0	10	6.33
2	Positive	91.67	86.67	91.67	100	90	92
3	No.Exp.	8.33	0	0	0	0	1.67



92% (aggregate) respondents are agree with, the employees are enthusiastic for applying to PERS. TM4 grade respondents are fully (100%) agree about willingness of employees. Only from TA 6.33% respondents gave negative response in respect of employee's enthusiasm.

**Consulting with Supervisors**

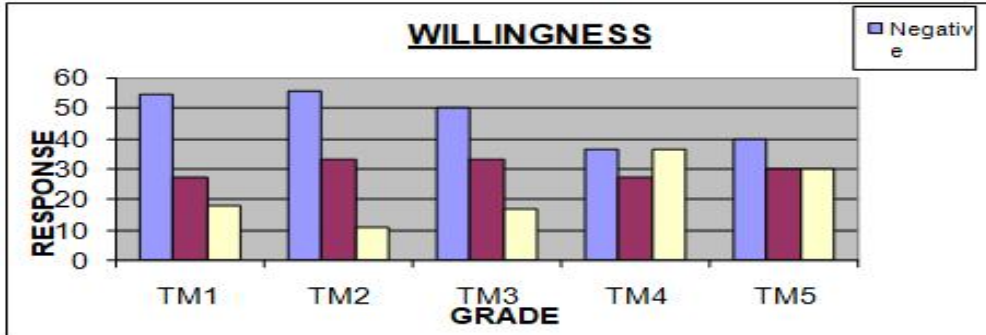
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	33.33	50	33.33	45.45	60	44.42
2	Positive	41.67	43.75	50	18.18	40	38.72
3	No.Exp.	25	6.25	16.67	36.36	0	16.86



From all shops 44.42% respondents think, team members are not consulting with them before applying for PERS & only 38.72% are agree about consultation of team members with TM grade employees. TM3 grade 50% respondents are agree.

**Willingness of TM's**

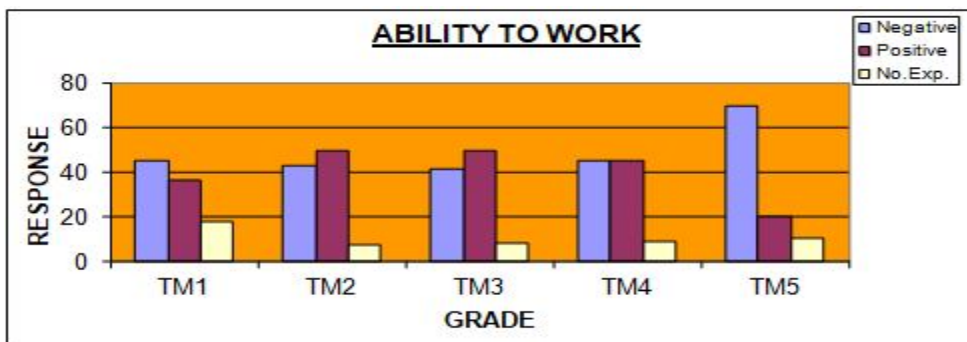
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	54.55	55.56	50	36.36	40	50.13
2	Positive	27.27	33.33	33.33	27.27	30	32.17
3	No.Exp.	18.18	11.11	16.67	36.36	30	17.52



From all grade 50.13% (aggregate) people think that the team members are not willing to work other dept. after getting PERS benefits. Only 32.17% respondents are agree about willingness of TM's. According to this response we can say that the TM's are not so happy to work other dept.

**Ability to Work**

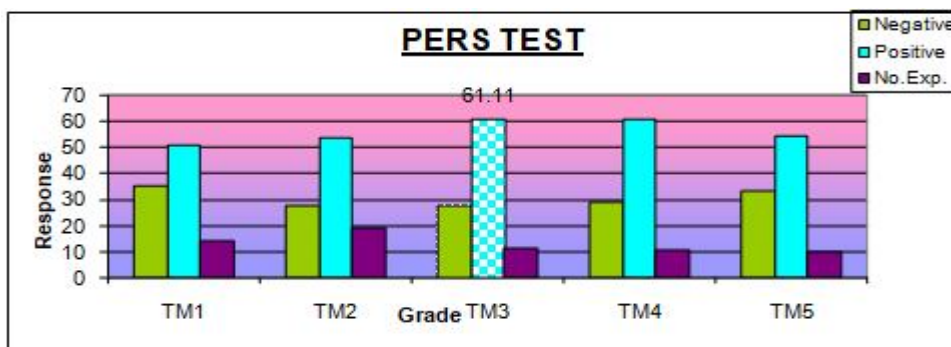
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	45.45	42.86	41.67	45.45	70	40.09
2	Positive	36.36	50	50	45.45	20	40.36
3	No.Exp.	18	7.14	8.33	9.09	10	10.55



40.36% respondents are agree with the TM's higher level of ability at work. TM 2 & TM 3 grade 50% respondents agree with the ability of TM's. But on other side 40.09% respondents say that the TM's are not using their higher level of ability at work.

**PERS Test**

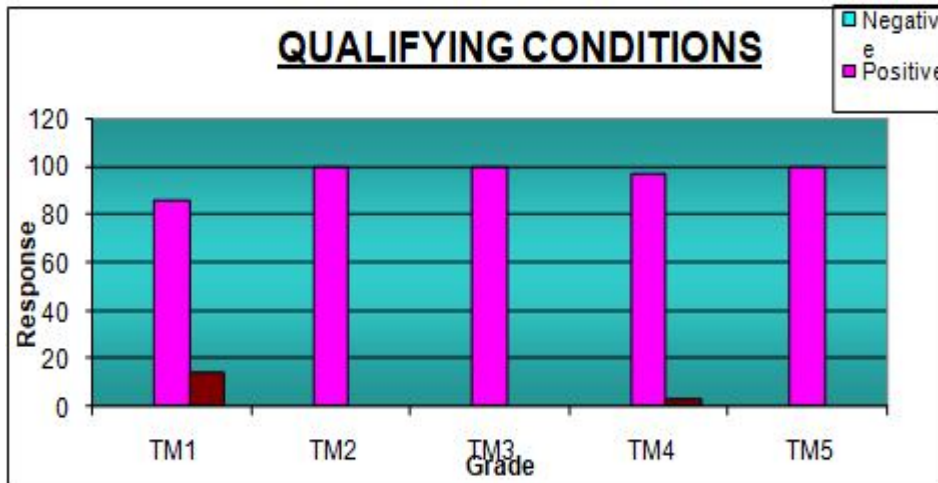
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	35.21	27.27	27.78	28.79	33.33	30.62
2	Positive	50.7	53.41	61.11	60.61	54.39	56.3
3	No.Exp.	14.08	19.32	11.11	10.61	10	13.08



Above 56.3% respondents are positive about PERS Test & the way of manner in which the tests are conducted. It means written test, Practical test of PERS is in the favor of team members. Only 30.62% are not agree about this.

**Qualifying conditions**

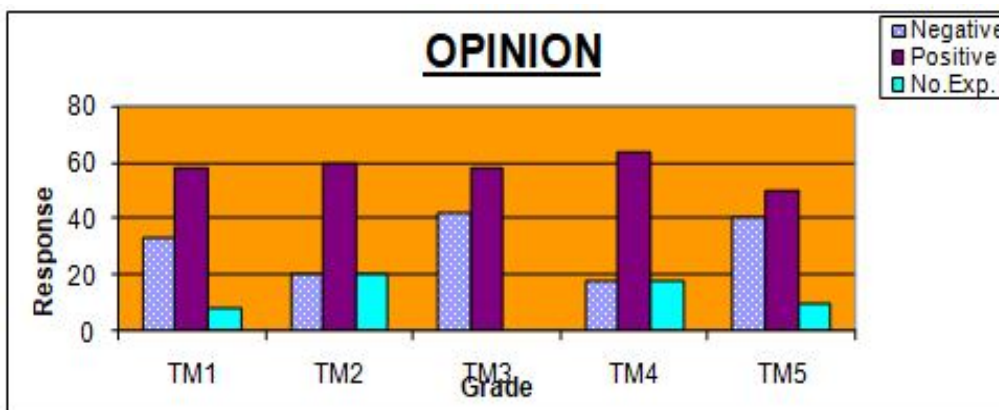
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	0	0	0	0	0	0
2	Positive	86.11	100	100	96.96	100	96.61
3	No.Exp.	13.88	0	0	3.03	0	33.83



96.61% respondents are positive about PERS Qualifying Conditions. As per the response, they strongly stress on this, the PERS process should have Qualifying Conditions in the area of Attendance, Discipline, SQDCM score. From TM2, TM3 & TM5 grade 100% respondents are agree with Qualifying Conditions. TM1 to TM5 no one gave negative response for Qualifying Conditions.

**Opinion**

Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	33.33	20	41.67	18.18	40	30.64
2	Positive	58.33	60	58.33	63.64	50	58.06
3	No.Exp.	8.33	20	0	18.18	10	11.3

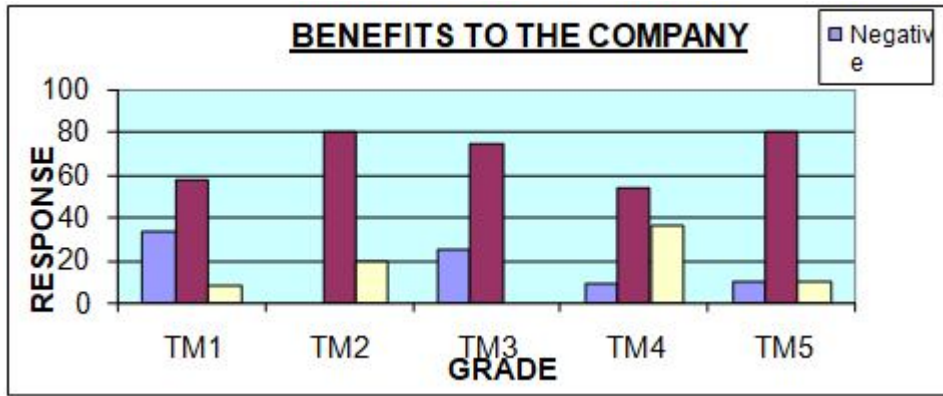


58.06% respondents are in the favor that the PERS process is better to run by company itself. 30.64% respondents do not agree with this point. They think it will better to contract out running of PERS to an out side agency.

**Benefits to the company**

Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	33.33	0	25	9.09	10	15.48
2	Positive	58.33	80	75	54.55	80	69.58
3	No.Exp.	8.33	20	0	36.36	10	14.94

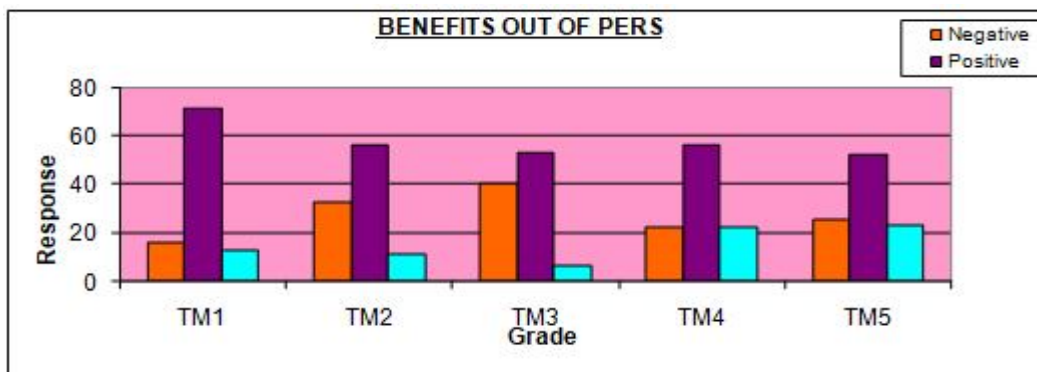




69.58% respondents are strongly agreed about PERS benefits to the company. TM1 & TM5 grade 80% respondents are positive. Only 15.48% are having negative opinion about this point.

**Benefits out of PERS**

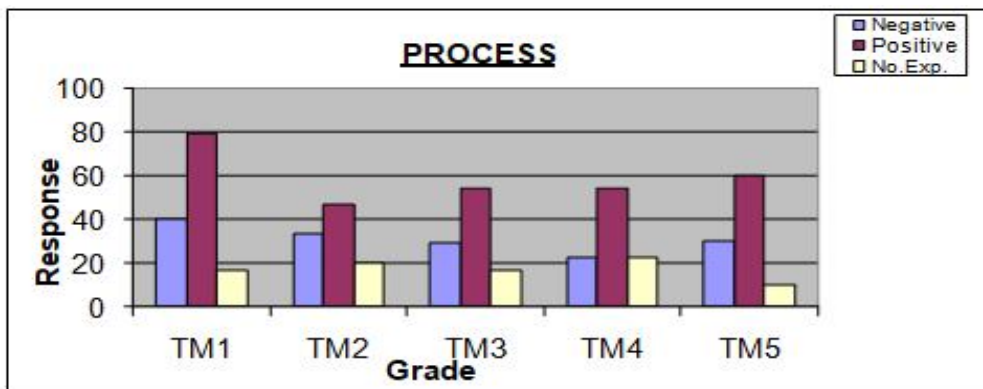
Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	15.95	32.77	40.62	21.83	25.31	27.3
2	Positive	71.27	56.3	53.12	56.32	51.89	57.78
3	No.Exp.	12.76	10.92	6.25	21.83	22.78	14.91



57.78% (aggregate) respondents are agree about benefits out of PERS. Company as well as TM's are taking benefits out of this scheme by motivating them in manner of increments & if the TM's are keen, enthusiastic then it's always increase production of the company. Only 27.3% are not in favor of benefits out of PERS.

**Process**

Sr. No.	Response	TM1	TM2	TM3	TM4	TM5	Agree
1	Negative	40.16	33.33	29.16	22.72	30	23.87
2	Positive	79.16	46.66	54.16	54.54	60	58.9
3	No.Exp.	16.66	20	16.66	22.72	10	17.21



58.9% (aggregate) respondents are positive about PERS Process. They strongly agree with that the entire PERS process is very transparent, driven by policies & beyond any influence. From TM1 grade 79.16% respondents do agree with PERS Process.

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**11. MAJOR OBSERVATION**

My observation and finding during my project in TATA MOTORS Ltd. are listed below.

- ✓ For motivating all employees PERS is very beneficial. It's real encouraged employee for giving their best at work & acquire knowledge about their trade & other trade also.
- ✓ This scheme makes employee versatile. Every time management try to fulfill their needs whether it is monetary or others.
- ✓ According to project response I observed that PERS is very beneficial to the employees. Because above 73% respondents gave this feedback.
- ✓ This scheme is not only increase employees monetary satisfaction level but also encourage them to work best.
- ✓ But on other side I think PERS is not so much beneficial to the Management. Because lack of implementation after giving PERS benefits to the employee. In real manner we are not using employee's versatility for management benefits.
- ✓ Team Members are very enthusiastic for taking PERS benefits & also aware about itself. They have willingness approach towards PERS.
- ✓ PERS Qualifying Conditions are so much satisfactory at the level of Team Members & the Management. Because above 81.18% respondents are strongly agree with the Qualifying Conditions. PERS process should have qualifying conditions in the area of attendance, discipline & SQDCM score. They really feel that this area should be taken into consideration for PERS process.
- ✓ According to observation PERS process is acceptable for the Team Members & also for the Management. Above 62.27% respondents are agree with this point. It means PERS process is very transparent & beyond any influence.
- ✓ About the Awareness of PERS 67% respondents are given right answers. Means they aware about PERS rules & regulations, eligibility criteria.

**12. MAJOR FINDINGS**

- ✓ Company is having good motivating scheme, which is beneficial for the Team members & also for the Management.
- ✓ This scheme has technical base for each level of employees. Because of PERS TML can evaluate each employees performance in every year. Performance Appraisal Form is used for this purpose. And HR dept. mentioned separate file for the same.
- ✓ TML providing training for all employees according to their need. It is motivating employees & management.
- ✓ I observed that, the HR dept. have very large responsibility. Every time they encourage Project Trainees & other contractual employees.
- ✓ TML having seminars for employees. Induction program also conducting for refreshing mind for each employee.

**13. IMPLICATIONS**

- Identification of all type of knowledge about PERS is important for a proper implementation. I am suggesting identifying & maintaining all type of knowledge. And most important thing is this knowledge should be provided to all employees who are not directly connected but they just conduct the PERS test & also guide their Team Members. There is a need to arrange an induction Program for these TM's regarding PERS.
- Implementation of the Versatility / C Versatility knowledge is most important factor. Those who are getting PERS benefits (increments) I think they have to transfer other dept / shop. After this only PERS become more beneficial to the company in real manner.
- Management also can encourage employee to apply for PERS.
- For improving efficiency of each individual in their work company can conduct the motivation plan to motivate them.

**14. CONCLUSION**

On the basis of observation I conclude that Potential Enhancement & reward Scheme (PERS) is a HR system which can retain, motivate work force to a great level in this competitive world. Knowledge & skill are the heart of this process and it can be properly evaluated only by / through this scheme. I am very proud to mention that I had a very good practical experience while doing my summer project at TATA MOTORS Ltd., Chikhli. PERS is very essential to developed & increase productivity of organization as well as performance of each individual. I got very great exposure, not only in my project but also other's activities like training, induction program.

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**A CASE STUDY ON LEVERAGING HUMAN CAPITAL THROUGH ORGANISATIONAL CULTURE & ENGAGEMENT**

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**LEVERAGING HUMAN CAPITAL & CULTURE:**

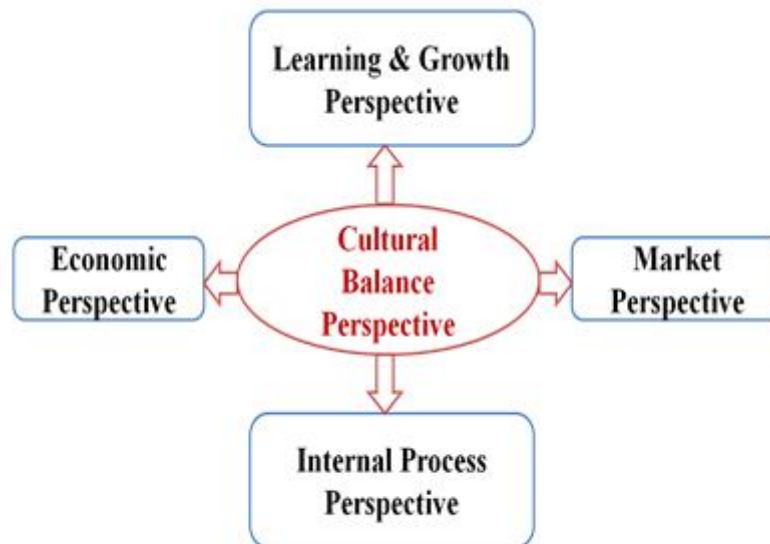
HUMAN CAPITAL is a massive strength for Organisations. Human force, the only asset that appreciates, requires continuous focus in terms of mapping & upgrading its Potential. Organisations today engage employees in order to leverage their talent and gradually this becomes the Culture at Organisations to nurture talent & raise human potential. This eventually leads to support the retention measures at the Organisation. Every organization develops and maintains a unique culture, which influence the way employees think, feel and behave in the workplace. This eventually supports employee engagement efforts and may further results into assisting the retention process. More than half of all organizations globally have difficulty retaining some of their most valued employee groups. The recent KPMG's annual compensation survey 2017-18 stated that 13.4% is the average annual attrition across the sectors with approx. 50% of employees leaving for better pay & better career opportunity. Operationally this attrition may or may not be accepted by the respective industries; however it does signifies the rational for studies in the field employees' engagement. (<https://assets.kpmg.com>) Organisational Culture accommodates a desiring culture that influences retention. Studies have signified that strong management transparency leads to 30% better employee retention.

Organisational culture once in line with human culture, potentially leverages the talent pool. Engaging this Talent is a primary focus for organisations. Culture for business, it is either a force for change or a definite barrier to it. For employees, it is either the glue that bonds people to an organization or what drives them away (Naicker, 2008). Organizations across the globe have a different style and culture, along with varied business needs and priorities. It is critical to start with HR practices that are right for an organization. This would support sustainability and long-term organisational performance (Talent Trend in India Report by E&Y 2015). Managers, today, are increasingly challenged with changing an organization's culture to support new ways of accomplishing work. Culture determines things like loyalty and commitment, how employees work and how far they are prepared to take risks. The culture of organization has been affected by attitudes, norms and beliefs that lead to strong communication between employees. Organizational culture is an important recipe for the encouragement or discouragement of behaviours in organization. It serves as a link or bond between employees and organization. Organisation culture can be defined as the cumulative beliefs, values, and assumption underlying our transactions with nature and various important phenomena. An organisation, like an individual, has a body and personality. It can remain hale and hearty if the body and mind of the organisation is culturally healthy (Pareek, 2004). The Organisations experiences various sorts of cultures. *Clan Culture* where by organization promotes teamwork, participation, and consensus among employees. *Adhocracy Culture* where in organization promotes individual initiative and freedom to employees. *Market Culture* where by Organizational style is based on competition & basically designed based on Customer oriented approach. And *Hierarchy Culture* where by formalized and structured work environment & System oriented approach is adopted. The cultural values at the Organisations have depth and hence it has a long lasting impact.

Smooth Oil, Lubricant manufacturing company having history of more than 50 years ensures that the Organisational Culture drives the performance of the Organisation. A value based Organisation, Smooth Oil, largely experiences a *Market culture* and supports the *Clan environment* where it promotes the Teamwork & participation of employees. Smooth Oil considers that there is correlation between Change management & development orientation at Organisation. Both aim at cultural advantage. In similar context UniMix corporation solution also strongly believes in culture management. UniMix is a firm offering various customized services to the Corporate Sector based on their needs pertaining to Legal Compliance, Recruitment services & various range of HR related solutions. The Consultancy supports formalized and structured work environment and system oriented culture (*Hierarchy Culture*). They also advocate a *Market culture* persists at Organisations where by Organisations focus on Competition in market & accordingly frame strategies & adopt respective culture. Strongly they believe that Culture shall influence the Employee retention aspects at the Organisation. In their purview employee engagement programmes, work environment in the organisation, attractive compensation policy, recognition of the employees for the achievement and leaders leadership style are the factors which helps to retain the employees in the organisation.

**CULTURAL BALANCE PERSPECTIVE**

Every organization develops and maintains a unique culture, which influence the way employees think, feel and behave in the workplace. The competitive environment of business has changed not only in the business world but also in the mindset of the individuals that work in those organizations (Madueke, 2017). Organisational culture is intangible and functions like invisible hands which guide the employees of an organisation for better performance and more satisfaction (Mishra, 2002). The proper balance in the Organisational culture may get accomplished through focus on core perspectives of the Organisations i.e, *Learning & Growth Perspective*, *Economic Perspective*, *Market Perspective* and *Internal Process Perspective*.



Source: Author's Study

Organisational Culture gets reflected through the strategic decisions at the Organisation, Leadership styles and the ways results are attained. Strength of shared belief & values supports the human development at the Organisation. Culture provides a sense of identity to employees and increases their commitment to the organization. FinStar is India's leading manufacturer of Commercial Air conditioners. FinStar experiences a *Clan culture* where by organization promote teamwork, participation, and consensus. Also they have maintained *adhocracy culture* with major focus to promote individual initiative and freedom. FinStar considers that the major challenges while adopting Organisational Culture by the employees are approaches of top level management, positive leadership, personal development and growth, employee's morale, education and family environment. FinStar believes that to maintain the Organisational culture an organisation should have transparency among the employees that will make them more loyal towards the organisation. Appreciation and recognition plays major role to make employees more enthusiastic towards their work. To keep work force motivated is the mantra for the company. Employee Engagement helps in maintaining & enhancing Organisational Culture. Leveraging Human Potential does require conscious focus on Organisational Culture which potentially may lead to the retention of the Employees.

IPL, a Printing & Packaging company is operational since last 28 years. Today with 750 employees, IPL is one among the major players of the industry. They sincerely believe that Organization culture goes a long way in creating the brand image of the organization. The culture shapes the way employees interact at their workplace, thereby impacts positively on the growth of the organization. Employee centricity is their motto and hence *Clan culture* persists whereby organization promotes teamwork, participation, and consensus. They also believe in *Market oriented culture* in order to shape up the business based on competition & Customer orientation. The major challenges faced by employees while adopting Organisational Culture at IPL has been probably the Communication Breakdown & Fear of losing Job. This sounds very logical as adopting culture isn't easy & many Organisations shall face similar challenge. IPL considers that Organisational Culture can be developed through strategic engagement programmes. IPL finds Recognition of Employees for achievement and Attractive Compensation policy are key factors pertaining to employee retention at the Organisation.

**DILEMMA OF CULTURAL EXISTENCE**

Organisational Culture has the intangible strength that supports the growth of the Organisations. One of the fruitful by products of having progressive culture is the retention of employees at Organisations. However does that alone ensure retention? Culture becomes determiner for the success of the Organisations. While that may

stand true but is it the only determiner? A healthy organizational culture rests on eight strong pillars of the —OCTAPACE profile (developed by U. Park) refers to Openness, Confrontation, Trust, Authenticity, Proactive, Autonomy, Collaboration and Experimentation. The study of OCTAPACE culture of any organization helps in giving proper training to the employees for maintaining a healthy environment and it also helps in dealing with various problems that exist in the organization (Fatima, 2017). If that's true then there shouldn't be any IR issues at Organisations neither that there should be any progression complexities. That reminds, the smoothest of the Organisations, have faced the toughest of the storms while they all had progressive culture. Specially while attempting human development the cultural ethos may not be the sole influencers. If dilemma surrounds the fact that, "Cultural existence is the passport to success", so then what ensures success? Contemplate and Reflect.

### **TEACHING NOTES FOR THE CASE**

#### **TEACHING OBJECTIVES**

The following Teaching Objectives may be considered with respect to the case:

1. To facilitate the readers / students with the understanding on Organisational Culture & Engagement while demonstrating the need for leveraging Human capital through Organisational Culture.
2. To narrate the readers / students with the real time narrative in order to gain practical exposure and imbibe the essence of Organisational Culture.

#### **LEVEL OF ANALYSIS**

The present case is a type of Teaching case with focus on Appraisal Case approach. The analysis attracts understanding of basic management aspects and Organisations culture acumen. This case is suitable for the practical & case study approach at the level of Management Students. To be specific BBA Final Year students & MBA Students shall have a deserving benefit out of this General Management case. Executive MBA Students & start ups in in respective Industry may also get benefitted.

#### **STUDENT ASSIGNMENTS:**

As part of the case study delivery, students may be assigned certain tasks pre & post delivery of the case.

- Pre discussion Task: Grasp fair understanding on Organisational Culture & Engagement through respective journals & books in Library and E-Sources
- Post discussion Task: Conduct review of further literature pertaining to the theme of the case. Post discussion schedule shall also include discussion round on a few questions pertaining to the case.

#### **BROAD DISCUSSION QUESTIONS**

- Q.1: Discuss the essentials of the Organisational Culture while highlighting the various sorts of Cultures experienced by the Organisations.
- Q.2: Unleash the dilemma surrounding the acceptance of the notion that, "Culture is the essential tool to gain momentum for the Organisations".
- Q.3: Derive a balancing perspective towards establishing, maintaining & controlling the Organisational culture in light of the perspectives stated in the case.

#### **READING REFERENCES**

The following references may be helpful in gaining further insights on the theme of the case:

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- ▶ Munish, R. A. (2017). Employee Engagement & Retention, International Journal of BRIC Business Research, Volume 6, Feb.'17

#### **POTENTIAL BENEFITS OF THE CASE**

- ▶ Students of Management Education:

- Live case exposure on Organisational Culture & engagement aspects. Students shall gather learning on functioning of the Industries in light of the theme of the study.
- The case shall assist in learning the leveraging of human capital through Cultural development & engagement philosophy at Organisations.
- The case will be helpful in General Management Subjects and overall shall support in gaining business acumen.

▶ Executive of Companies

- The case being a general management topic, this will support the management in augmenting the cultural aspects at the organisations, benefiting executives to gather inferences on real time issues.

▶ Startups in respective Industry

- The new companies stepping in the business will find this case as a good demonstration of real time issues & challenges.
- The startups can learn the respective strategies & potential challenges towards gaining a better Organisational Culture.

**PROPOSED SESSION PLAN**

The case study delivery may have the following session plan

Action sequence	Session Details	Duration
Action – 1	<p><b>Pre Case Discussion</b></p> <ul style="list-style-type: none"> <li>▶ State the objectives of the Case</li> <li>▶ Announce the students to gather understanding on Organisational Culture &amp; Engagement aspects</li> </ul>	3 Days before the discussion session
Action – 2	<p><b>Case Discussion</b></p> <ul style="list-style-type: none"> <li>▶ Nominate specific sections to students to narrate (Soft copy Display / Hard Copy distribution)</li> <li>▶ Appoint a set of 3 students to record the key points</li> <li>▶ Allow the appointed students to narrate the key points after case narration</li> <li>▶ Facilitator to conclude with major learning from the case and the case implications</li> </ul>	1 ½ Hours
Action - 3	<p><b>Post Discussion</b></p> <ul style="list-style-type: none"> <li>▶ Submission of written responses to the discussion questions for the case</li> <li>▶ Select a set of Two teams comprising of 4 students each (during Action -2) and assign the task of presenting the same case one by one in front of the class. (Action -3)</li> <li>▶ Open the forum for discussion &amp; conclusion of the case</li> </ul>	3 days post the discussion 15 minutes presentation time to each team 30 minutes
Action – 4	<p><b>Examination Case study</b></p> <ul style="list-style-type: none"> <li>▶ The case may be presented with precise draft (case let) as a question of General Management Strategic Subject</li> <li>▶ A 20 marks allocation to case with 30 minutes time slot</li> </ul>	As per Examination Schedule
Teaching Aid	<ul style="list-style-type: none"> <li>▶ Projector to display the Soft copy of the Case and handover of the same through respective mode.</li> <li>▶ Black / White teaching Board for facilitator &amp; student presenters</li> </ul>	

**DISCLAIMER**

The names of the companies mentioned in the case are changed adhering to the disclosure policy of the Original companies visited by the Author. The case was developed post interview of the company representatives pertaining to the theme of the study.

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TO ANALYZE THE PERCEPTION OF THE YOUTH TOWARDS THE MOBILE ADVERTISEMENTS IN INDIA

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**ABSTRACT**

Television will remains the biggest advertising platform in India, but with growing demand for smart phones, availability of cheap 4G handsets and falling data prices has increased mobile ads spending significantly by the different advertisers and at the same time the acceptance of the mobile ads has been also increasing by the mobile users. Based on the reports companies are investing huge amount of money for mobile advertisements as they have seen the impact of the same. Digital advertising has been around since the very early days of the internet, and now a days it has been one of the most popular monetization model in the digital world. Mobile advertisements has been become business model for many of the organisation. In this research paper researcher has As of today, it forms the core business model of many digital ventures, including news, entertainment, media and much more.

In this paper, researchers have made an attempt to analyze the perception of the youth towards the mobile advertisements in India.

*Keywords: Mobile advertisement, Perception of youth, Social media etc*

**INTRODUCTION**

Mobile ad spending is expected to grow at a compound annual growth rate (CAGR) of 59% to reach Rs13,325 crore by 2020, with affordable internet and cheap Smartphone driving content consumption, and huge acceptance from customer side towards the mobile advertisement has given boost to the industry. Mobile ad spending was Rs 2525 Crore in 2016 in India. As per figure 1, India is on Rank 1, where 35% adults who do not own mobile phone or Smartphone , while 40% of the adults have mobile phone but which is not smart phone, as per the report of 2018. On other hand, based on other report, In India there are 450 million mobile internet users, and their usage of mobile phone includes shopping, ticket bookings, and sharing of many information and knowledge. One of the study says that, 68% of total time spent on internet by Indians is on their mobile device, and by understanding this usage pattern companies has started investing more in mobile advertisements, as companies are achieving their objectives by investing, they keep investing more amount in the mobile ads.

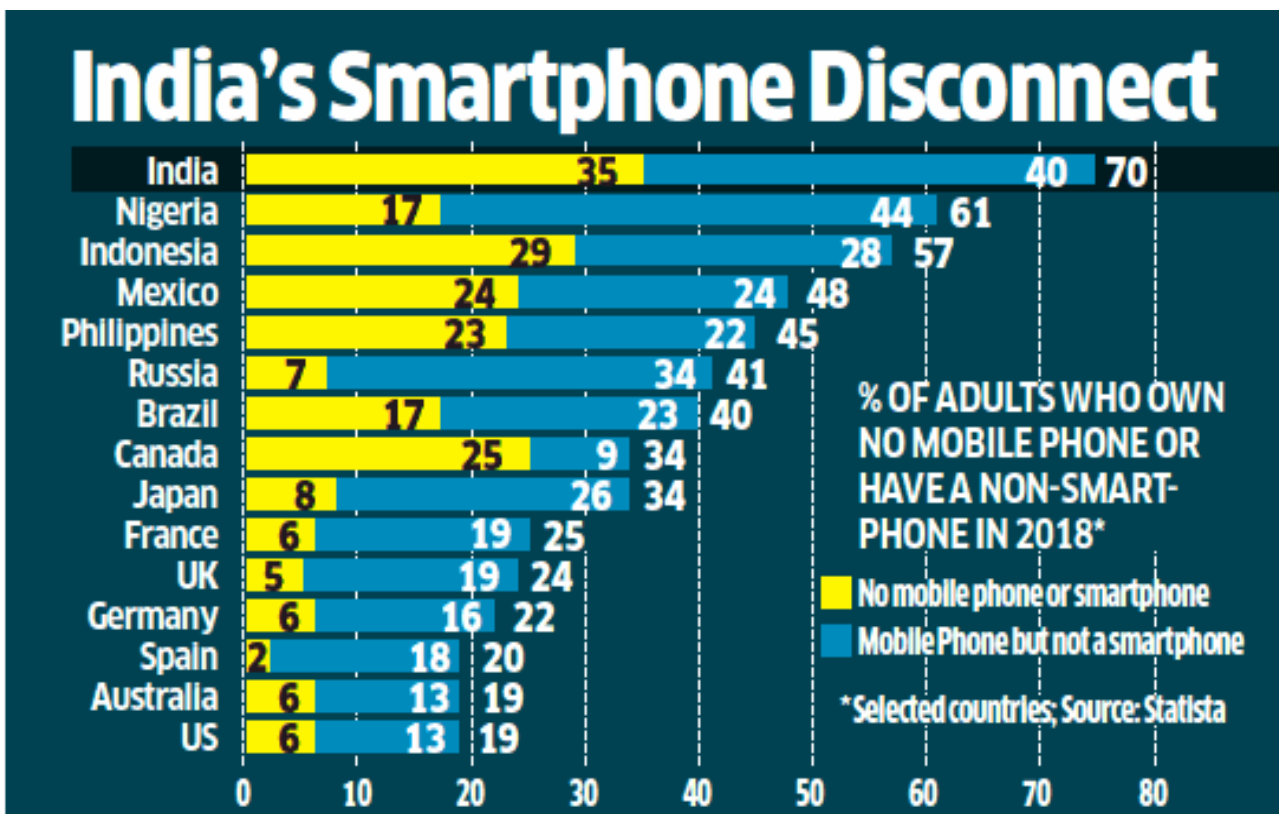


Figure-1

Additionally, the research firm predicted double-digit growth for mobile ad spending in the next few years in India. By 2021, mobile will account for more than half (~62.0%) of overall digital ad spending, which is expected to hit a total of \$2.8 billion.

According to the report, there is a 124% YoY increase in mobile video ad consumption in India this year. As a result, India now ranks 6 in the world in terms of mobile video ad consumption. This mammoth increase in video ad consumption has also been driven by increased investments by advertisers in this particular format.

### **FACTORS AFFECTING POPULARITY OF VIDEO ADS IN INDIA**

There are few factors which contributes to the sudden popularity of video ads in Indian market, they are as mentioned below:

- Higher user engagement
- Proliferation of faster mobile network
- Cheaper 4G smart phones
- Domination of Android smart phones in India
- Increase investments from advertisers
- Improved technology/better implementation

### **OBJECTIVES OF THE STUDY**

1. To understand the perception towards the mobile advertisements of youth.
2. To identify the main sources of advertisement for the youth.
3. To study the mobile ads witness pattern of the youth.
4. To analyze the impact of mobile ads on the buying behaviour of youth.

### **TARGET POPULATION AND SAMPLE SIZE**

Target population was the students of UG and other diploma courses. The questionnaire was administered to 130 respondents out of which 115 valid questionnaires were considered as sample size for study purpose.

### **HYPOTHESIS:**

H01: There is no association between the time spend to see ads in mobile and liking towards the advertisements.

H02: There is no significant relationship between mobile ads and past internet search in quick decision making.

H03: Time spent on mobile advertisement and purchase behaviour are independent.

### **RESULTS**

- In the conducted survey, there are total 115 respondents and out of which 58(50.9%) are male while 55(48.2%) are female and 1 respondent has preferred not to say.
- 11.3% of the total respondents uses mobile since more than 6 years, while 48.7% of respondents are using mobile since last 2-6 years and 40% of respondents are using mobile phone from last 2 years.
- Data says that, the main source of advertisement for 48.2% is TV, 21.1% Internet, 12.3% Youtube, 7.9% Mobile, 6.1% Others, 2.6% Magazine and 1.8% Facebook.
- According to data, 83.5% respondents have seen mobile ads while 14.8% respondents are not sure on and 1.7% of respondents have never seen mobile advertisement.
- When it comes to mobile advertisements, majority of respondents i.e. 43% have seen ads on youtube, 21.9% have seen on social media sites, 16.7% have seen ads during other internet search, 8.8% seen while during some other work on internet, 7.9% have seen ads on Facebook and 1.8% have seen ads on twitter.
- According to data, only 18.3% of respondents only likes the mobile ads, while majority i.e. 36.5% of respondents are having neutral opinion about that, while majority of respondents i.e. 45.2% do not like the mobile ads.
- Majority i.e. 77.4% of respondents says that, they hardly spent 5-15 minutes to see the mobile ads.
- Based on data majority got agree on that, the mobile ads which they witnessing are some time based on their past search and they found it useful to make decision in that regards.

- According to data, majority that is 43.5% of respondents are in the opinion that, if companies wants to reach out to the maximum number of customers, they should continue with the mobile ads while even 27% of respondents have neutral response on this, only 29.6% of respondents are not in favour of mobile ads to reach out to the maximum number of customers.
- But 40% of the respondents not got influenced by the mobile ads, 34.8% of respondents are under dilemma, only 25.2% of respondents are only influenced by the mobile ads.
- Again, data says that 40% are not got influenced by the mobile ads so they have never bought any things by seeing mobile ads, but here 36.5% of respondents have already bought something under the influence of the mobile ads and there are 23.5% of respondents, who are thinking but yet not bought anything based on mobile ads.
- Highest number of respondents i.e. 40.9% feels mobile ads irritating, 27.8% feels its unwanted, 19.1% says its wastage of time, 12.2.% says good for time pass, only 30.4% respondents are admitting that, it is useful to them.

**HYPOTHESIS TESTING**

Chi-Square Tests-H1			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.270 <sup>a</sup>	20	.441
Likelihood Ratio	19.510	20	.489
Linear-by-Linear Association	.370	1	.543
N of Valid Cases	115		

**Decision:** From the above table of Chi-square test, the P- value of test (0.000) is more than the level of significant 0.05, hence study fails to reject null hypothesis. Hence it can be conclude that there is no significant relationship between time spent on using mobile phone and liking or opinion of the advertisement.

Chi-Square Tests-2			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.762 <sup>a</sup>	16	.004
Likelihood Ratio	28.506	16	.027
Linear-by-Linear Association	7.094	1	.008
N of Valid Cases	115		

**Decision:** From the above table of Chi-square test, the P- value of test (0.000) is less than the level of significant 0.05, hence reject the null hypothesis. Hence it can be conclude that there is significant relationship between past internet search and accordingly witnessing ads to make quick purchase decisions.

Chi-Square Tests-3			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.512 <sup>a</sup>	10	.397
Likelihood Ratio	11.924	10	.290
Linear-by-Linear Association	.002	1	.969
N of Valid Cases	115		

**Decision:** From the above table of Chi-square test, the P- value of test (0.000) is more than the level of significant 0.05, hence there is no evidence to reject null hypothesis. Hence it can be conclude that there is no significant relationship. So time spent on mobile advertisement and purchase behaviour is independent in the process of decision making.

**CONCLUSION**

Based on the data analysis , it can be said that respondents / youth who are spending huge amount of time on internet, and they are very well like to be available on majority of social media and other relevant sites. By understanding this behaviour if the advertisers wants to reach to the youth, they generally prefer mobile ads as a medium of communication. Through mobile ads any age group can be reached with less cost and wide reach will be guaranteed. But our data says that, though majority of youth respondents have came across the mobile ads but they do not like that much. They feel that because of over repetition of the ads it becomes unwanted and they start feeling irritating towards the mobile ads. So basic purpose of giving ads on mobile phone may not be achieved if the same strategy would be used by the advertisers. It does not mean that youth do not like mobile

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ads at all, there are few respondents who even got influenced by the mobile ads and they had made purchase decisions as well, there are set of group where they love to see the ads if repetition will be controlled and proper content should be provided. So here we can conclude that, with less number of repetition and good quality ads always attract youth, and even they find it useful to make purchase decision, so if brand follow this strategy they can surely achieve their goal of giving mobile ads.

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**E-SERVICE QUALITY, E-SATISFACTION, E-LOYALTY AND E-WOM IN ONLINE SHOPPING****Dr. Vijay Ganpat Dhamore<sup>1</sup>, Dr. Hrishikesh Dilip Patil<sup>2</sup> and Yogesh Madhukar Ghorpade<sup>3</sup>**Associate Professor<sup>1</sup> and Director<sup>2</sup>, JSPM's Kautilya Institute of Management and Research, Pune  
Research Scholar<sup>3</sup>, Computer Science Department, Bharti University, Coimbatore**ABSTRACT**

*The rapid expansion of e-tailing among Indian consumers shows a need to seriously sight E-Satisfaction and E-Loyalty variables to study and ultimately survive the Online Business. E-service quality led to E-satisfaction which further improves E-loyalty in Online consumers. E-Loyalty has become the important parameter for e-commerce business. In this study, relationship between E-service quality, E- Satisfaction, E-Loyalty and E-WOM is discussed and analyzed to study the impact of E-Satisfaction and E-Loyalty on E-WOM. A set of hypotheses was formulated. The survey sent through E-mail and Offline Questionnaire form to 110 respondents out of 95 were respondents taken for data analysis. The objective of this study is to identify the impact of E-Satisfaction on E-Loyalty and E-WOM.SPSS Version 20.0 is used for Data analysis. Finding from the study will further used for further research study considering other variables in the model.*

*Keywords: E-Service Quality, E-Satisfaction, E-Loyalty, E-WOM.*

**INTRODUCTION**

As compared with Offline mode of Information sharing Online mode is fast and saving time as well cost of businesses. Social Media tools like Facebook, Twitter, LinkedIn, Email are spreading information to diverse group of networked people. Word of Mouth extends rapidly through Social Media Tools. In the Era of IT and Internet, Indian Consumers are using social Media Platforms for Online Shopping. To extend e –business marketers use this type of new marketing tool to tailor goods and services. E-commerce is a trade representation that makes message, information incorporation; business digitized. E-commerce is having more advantages than traditional way of marketing and doing business in a modern way. Online shopping is one of the most common forms of e-commerce. Therefore, it is important to understand the variables involved in e-commerce and in particular, to model how customers' E-WOM will be impacted by different factors like E-Service Quality, E-Satisfaction, and E-Loyalty.

**REVIEW OF LITERATURE****E-Service Quality**

E-service quality can be defined as customers' perceptions of the outcome of a service along with recovery perceptions if a problem should occur (Collier & Bienstock, 2006). Parasuraman et al. (2005) also proposed a definition of e-service quality namely that eservice quality is the extent to which a website facilitates well-organized and effective shopping, purchasing and release of goods and services. Researchers often describe service quality as an indefinable and conceptual notion, similar in nature to an approach, as it represents a common, overall evaluation of a product or service (Parasuraman, Zeithaml, & Berry, 1985). Service quality can be defined as a consumer decision or insight of an entity's overall superiority or advantage, often as a result of comparing potential with perceived presentation (Parasuraman, et al., 1988). Similarly, Dagger & Lawley (2003) defined service quality as the result of an estimate process in which the customer compares their observations of the service with their expectations. Carmen et al.(2012) investigated the influence of traditions on the affiliation between each of the dimensions of e-service quality and satisfaction with a web site involving purchase of a tourism service. The results showed that the control of the dimensions of service quality on the tourists' satisfaction with their online purchases is moderated by cultural dimensions. In Conclusion, Service quality has a positive effect the Satisfaction. In the online environment context, customer satisfaction is sometimes labeled as e-satisfaction, even in the tourism field (Kim, Ma & Kim, 2006).

**E-Satisfaction**

Satisfaction has generally been presented as an emotional state arising from the non confirmation of positive or negative initial expectations for the experience of possession or consumption (Oliver, 1980). Anderson and Srinivasan (2003) suggest a definition of e-satisfaction as "the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm". E-Satisfaction thus can be applied to every business firm or industry to gain satisfied customer base. Shanker et al (2003) argued that loyalty should not be viewed just as repetitive purchase behavior. Repeated purchase is just a demonstration of the decision-making process, and does not include the disposition and approach of reliability. The true loyal consumers

should have a sense of promise and reliance towards the company, rather than merely being attracted and thus tend to prefer this trade. In Conclusion, a Satisfied Customer will be a loyal customer for a firm.

### E-Loyalty

Customer loyalty has been highlighted by many industries to boost customers' loyalty through retention programs and relationship marketing strategies (Hallowell, 1996). The consumer brand association is serious for the construction of faithfulness. To gain a great asset for a company there are several benefits like reducing cost of production and saving of money on marketing the product. E-Satisfaction is gained after the consistent purchase of product that is from a loyal customer. According to Pareto rule, 80% of the profits are created by 20% consumers (Johnson et al, 2006). Therefore, the 20% consumers are the company's core consumers, or called loyal consumers. Numerous studies indicated that loyal consumers are the key to productivity and sustainable development. Keller (1993) defined customer loyalty as repeated purchase behavior driven by the love for a certain product over a period of time. "Satisfied online shoppers are more prone to advocate the web site to others than disappointed shoppers" (Ha & Im, 2012). In fact, several researches prove the significant effect of satisfaction on WOM. (eg. (Matos & Rossi, 2008). Therefore, the satisfaction level regarding the online booking website may influence the tendency to write online reviews, in order to share the experience and advice other tourists, for instance. So, it is expected that:

### E-Wom

Srinivasan et al (2002) investigated the antecedents and consequences of customer loyalty in an online business-to-consumer (B2C) context. They recognized eight causes (the 8Cs—customization, contact interactivity, care, community, convenience, cultivation, choice, and character) that potentially impact e-loyalty and expand scales to gauge these factors. The data also revealed that e-loyalty had an impact on two customer-related conclusions: word-of-mouth endorsement and readiness to pay more. In contrast with other types of communication, WOM is associated with high levels of credibility, implying high impact in the decision-making process, particularly in the tourism perspective (Kastenholz, 2002). Word of mouth can be defined as the act of communicating formally or informally with other consumers about products and services of the company, including recommendations and defending the company against attacks from other consumers. Pasumarthy (2015).

Salhenia et al (2014) discussed the affecting factors on positive word of mouth and loyalty based on faith enrichment that might be influenced by results of service quality in internet banking context. The importance of faith, WOM and reliability in professional services marketing is widely acknowledged. They found that fulfillment or satisfaction is an important requirement for creating long term customer relationships and finally to boost loyalty. Findings also indicated that e-loyalty has a significant and positive effect on WOM. Thus proposed Hypotheses from the review of literature are as follows:

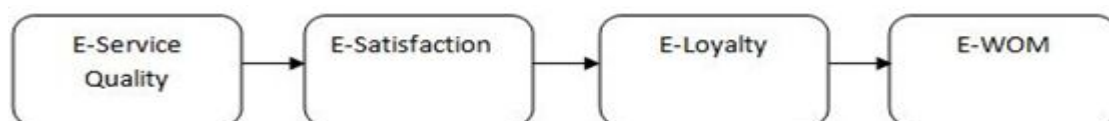
### HYPOTHESIS DEVELOPMENT

**H1:** E-Service Quality has a positive effect on the E-WOM.

**H2:** E-Satisfaction has a positive effect on the E-WOM.

**H3:** E-Loyalty has a positive effect on the E-WOM.

### PROPOSED MODEL



### QUESTIONNAIRE INSTRUMENT

In formulating the questionnaire the basic guidelines used in designing a questionnaire such as question wording, measurement of variables and general appearance of questionnaire (Malhotra, et al., 2006; Zikmund, 2003) were taken into account. Question wording is the translation of the desired question content and structure into words that respondents can clearly and easily understand (Malhotra, et al., 2006).

### PILOT STUDY

A pilot study that covered 85 online consumers from Pune City was conducted. The pilot study was used to evaluate the questionnaire instrument that was to be used for the main research. The aims of the study were (1) improving the clarity of the questions, (2) sharpening the scope of the coverage, (3) evaluating the time taken to complete the questionnaire to make sure that the questionnaire was not too long to be completed, and (4) to make answering the questionnaire easy (Churchill, 1995; Malhotra, et al., 2006).

**DATA COLLECTION**

Of the 110 questionnaire send 100 were returned and 95 are usable. So, total respondents were 95 online shoppers who were using online shopping for purchase of a product.

**RESULT ANALYSIS**

For this research purpose, SPSS 20.0 version is to be used to conduct the following analysis: One-way Analysis of Variance (ANOVA), Pearson’s Correlation Analysis and Multiple Regression analysis.

**Total Respondents-95**

Total respondents from Online as well as Offline survey were 95. Online Survey was conducted by Google form and link was send to respondents. Offline survey was conducted though structured questionnaire form. Survey was open till 15 days to check fill the Questionnaire form.

- **Sampling Method-** Convenience Sampling,
- **Sampling Area-** Pune City, Maharashtra, India.

**Reliability Statistics-**Based on the result shown in Table No-1.1 of Cronbach’s alpha, all variables is consider reliable because they achieve alpha value 0.7 and above.

**Table No-1.1: Reliability Statistics**

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.983	.983	21

Cronbach's Alpha value is **0.983**.

**Table-1.2: Respondents’ Demographic Profile:**

<b>Characteristics</b>	<b>Percent (%)</b>
<b>Gender</b>	
Male	71.6
Female	28.4
<b>Age</b>	
Below 20	0
21 to 40	93.7
41 to 60	5.0
60 and Above	0
<b>Residential Status</b>	
Maharashtra	100.0
Outside Maharashtra	0
NRI	0
<b>Educational Level</b>	
Diploma	0
Bachelors Degree	31.6
Masters Degree	51.6
Doctoral Degree	16.8
Others	0
<b>Monthly Income</b>	
Below Rs 20,000	44.2
20,000-40,000	8.4
40,000-60,000	7.4
60,000-80,000	15.8
80,000 and Above	24.2
<b>Marital Status</b>	
Married	47.4
Unmarried	52.6

**Total Percentage - 100, Total Respondents - 95**

- **Online Shopping Usage since last 6 months-71.6%**
- **Interpretation (Table No.1.2)**

Majority of respondents are from Male category. Majority of respondents were age group of 21-40. All the respondents were from Maharashtra state. Mostly respondents are having Master degree with them as Qualification. Most of the respondents are earning below Rs.20,000 per month. Most of them were Unmarried. Majority of respondents use online shopping since last 6 months for purchasing products. It can be interpreted that Majority of youth people preferred to purchase from online shopping medium/channels.

**Table-1.3: Correlation Matrix**

Correlations					
		E-Wom	E-Service Quality	E-Satisfaction	E-Loyalty
Pearson Correlation	E-Wom	1.000	.872	.784	.901
	E-Service Quality	.872	1.000	.946	.976
	E-Satisfaction	.784	.946	1.000	.963
	E-Loyalty	.901	.976	.963	1.000
Sig. (1-tailed)	E-Wom	.	.000	.000	.000
	E-Service Quality	.000	.	.000	.000
	E-Satisfaction	.000	.000	.	.000
	E-Loyalty	.000	.000	.000	.
N	E-Wom	95	95	95	95
	E-Service Quality	95	95	95	95
	E-Satisfaction	95	95	95	95
	E-Loyalty	95	95	95	95

From table No.1.3, It can be interpreted that Factors like E-Service Quality, E-Satisfaction, E-Loyalty and E-WOM are highly correlated and having a strong relationships among each other.

**Table-1.4: Model Summary**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.952 <sup>a</sup>	.907	.904	.384	.907	294.596	3	91	.000

a. Predictors: (Constant), E-LOYALTY , E-SATISFACTION , E-SERVICE QUALITY

**Table-1.5: Anova Analysis**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.309	3	43.436	294.596	.000 <sup>b</sup>
	Residual	13.417	91	.147		
	Total	143.726	94			

a. Dependent Variable: E-WOM  
b. Predictors: (Constant), E-LOYALTY , E-SATISFACTION , E-SERVICE QUALITY

\*\*\* Significant at p<0.001

The Multiple R Value was 0.952 while the R Square Value was 0.904. The F value was observed to be 294.596 and p value was significant at 0.1 %.

The Multiple correlation coefficients being 0.952 measures the degree of relationship the actual values and the predicted values of EWOM. Because the predicted values are obtained as a Linear combination of E-Service Quality, E-Loyalty, E-Satisfaction .The coefficient value of 0.952 indicates that the relationship between EWOM and the three independent variables is quite strong and positive.

The Coefficient of Determination R-Square measures the goodness of fit the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. Thus, the value of R Square is 0.904 simply means that about 90.4% of the variation in



EWOM is explained by the estimated SRP that uses E-Service Quality, E-Loyalty, E-Satisfaction as the independent variables and R Square value is significant at 0.1% level.

**Table No-1.6: Coefficients Matrix**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.185	.121		-1.530	.129
	E-Service Quality(X1)	.019	.152	.018	.125	.901
	E-Satisfaction(X2)	-1.087	.113	-1.143	-9.592	.000
	E-Loyalty(X3)	2.136	.190	1.984	11.247	.000

a. Dependent Variable: E-WOM

The multiple regression equation is

$$Y=0.185+0.019X1-1.087X2+2.136X3$$

As Shown in Table No-1.6, the coefficient of X1 is 0.019 represents the partial effect E-Service Quality on E-WOM holding the other variables as constant. The estimated positive sign implies that such effect is positive and that the E-WOM would increases by 0.019 for every unit in E-WOM and the coefficient value is not significant at 0.05% level.

The coefficient of X2 is 1.087 represents the partial effect E-Satisfaction on E-WOM holding the other variables as constant. The estimated negative sign implies that such effect is negative and that the E-WOM would reduces by 1.087 for every unit in E-Satisfaction and the coefficient value is significant at 0.05% level.

The coefficient of X3 is 2.136 represents the partial effect E-Loyalty on E-WOM holding the other variables as constant. The estimated positive sign implies that such effect is positive and that the E-WOM would increases by 2.136 for every unit in E-Loyalty and the coefficient value is significant at 0.05% level.

So the Hypotheses H1 was rejected and H2 ,H3 were accepted as per the coefficient value criteria for significance level. It means that there is a negative relationship between E-Service Quality and E-WOM. There is a positive relationship between E-Satisfaction and E-WOM. There is a positive relationship between E-Loyalty and E-WOM.

So, it can be concluded that Service Quality by online shoppers may not led to word of mouth. Satisfied customers' and loyal customer will always support for Word of Mouth to advertise products. So, Satisfied and Loyal Customers are the Brand Advocates for an Organization.

## IMPLICATIONS

Because No study of this kind which examines this study constructs and their relationships has existed in Maharashtra, this study insights will improve our understanding of the relationships between these constructs both globally and with in India. Also, comparing the relationships between the E-Satisfaction, E-Service quality, E-Loyalty and E-WOM relates to delivery systems as proposed theory. There is huge scope to understand and conduct research study on E-Security by considering the parameters in the current study.

## CONCLUSION

E-Satisfaction, E-Service quality, E-Loyalty and E-WOM at the beginning of the online retail presence, Web practice and modest prices will encourage success. Satisfied and Loyal Customers are the Brand Advocates for an Organization. Service Quality may be the factor for product awareness in the Market. Marketers has to focus on building strategies to achieve satisfaction level of customers as well as to make them loyal for a brand.

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## STRATEGIES FOR EMERGING BUSINESS ENVIRONMENT

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*As the world is moving towards a global smart village, organisations need to adopt various strategies to adapt themselves to the ongoing change and portrait their presence globally among the competitive environment. In this paper we will discuss in brief about the various strategies which the organisations should employ for their move towards the path of success. By adopting the strategies like use of artificial intelligence, live interactions through social media and corporate social responsibility the organisations will definitely improve their business development process and satisfy all the stakeholders of the business. Moreover, due to the changing needs of the customers, organisations are forced to adopt various strategies which may symbiotically benefit all the stakeholders of the organisation simultaneously. This review paper investigates the dimensions of how the various strategies like AI, Social media and CSR contributes to the company's success.*

*Keywords: Strategy, artificial intelligence, social media, corporate social responsibility.*

**INTRODUCTION**

There are various strategies which the companies have started deploying in their business. Some strategies like use of Artificial Intelligence in the business, implementation of CSR to develop a strategic branding have their roots in the market previously. The new strategy like the live interactions through social media and focussing on the community and not the buyers alone in social media marketing is one such strategy which is in the fledging phase and slowly making its significance among the stake holders. Apart from these strategies, companies should also focus on various social learning methods like digital learning forums where they can interact with the peer employees and learn from them through the various interactive methods.

In this paper we will discuss about the strategies like how the use of artificial intelligence strategy will help the organisation in improved decision-making opportunities apart from the redundant works assigned to the machine. In addition to these we will also focus on how the emerging trend of social media can be used as a better marketing strategy by the organisations.

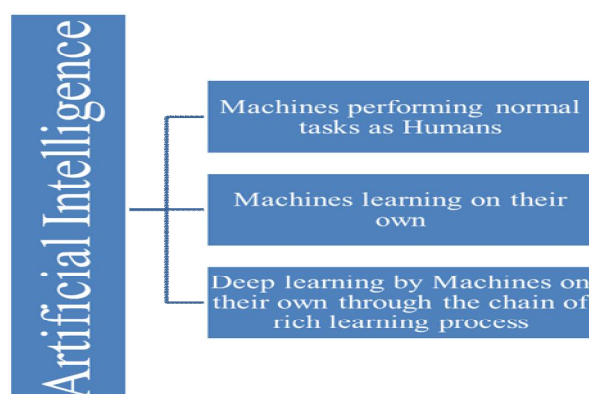
**1. Artificial Intelligence**

When we think of artificial intelligence (AI), we might think of dehumanizing interactions. We should not confuse AI with primitive marketing automation. Leading companies are embracing AI to perform repeatable, redundant tasks and to process large amounts of data not to avoid human interaction, but to enrich it.

AI has become a norm for many practical consumer experiences. Google maps are one such example where the customer uses real time data using the GPS facility available in their phones. In some cases AI can also be used as a rescue crew team by the local municipal corporations in the natural calamities like hurricane or flood. We can also expect to have well utilised applications of AI in near future based on the extensive utilisation of the AI in their business activities.

AI is also used for several Decision Support systems and in decision sciences for the organisational decision making which leads to the challenging and emerging business techniques. (Michael Goul)

The application and use of AI in the business are represented in the figure below.



Source: Christopher Penn, AI Expert

## 2. Strategy of Corporate Social Responsibility

Sometimes, CSR is associated with the concept of sustainable development and hence, strategy of sustainable development is the core concern of responsibility in the emerging business environment. Therefore, companies strategizing on CSR need to focus on innovating or finding such solutions for business activities, which are socially responsible, ecologically friendly and economically valuable. (Rok, 2010).

The modern organizations have engaged their management to navigate their stakeholders' concerns while implementing business model. These organizations identify the stakeholders through their own specific methods because there is no general standardized method of identification and the organization have to categorize the stakeholders for their CSR programs & their implementation would be a strategic move for the company to sustain the benefit in some way for the organization & its stakeholders.

Any organisation should adopt any of these four levels of CSR Activities to have a sustainable growth among the stakeholders. The four levels of the CSR responsibilities are as shown in the below figure:



Source: Adapted Carroll's Model in 1999

## 3. Strategies through Social Media

Nowadays Social Media plays a vital role in having virtual encounters before the in personal relationships. We also have number of websites which provides the review of the product in all 360 degrees and from which we have the prospective customers. So Social media plays a vital role in the emerging business environment and definitely it helps in the promotion of the business if handled properly by the organisations.

### 3.1 Use of Live Streaming Videos Strategy

From the last decade we can observe that the usage of the mobile phones to a great extent. The increase in the usage of smart phones by the people today has made us think that the social media is better than the direct personal interactions. Karine Pires in his research has found that the popularity of any entity increases in a live streaming video mode and it is the most recent trend to attract the people. So, the companies have started developing great community engenders to encounter the long-term brand loyalty through the most recent trend i.e. live streaming of the videos rather than the recorded video. The best example for this would be the Facebook Live Video.

Moreover, Smart companies must realize that social media and technology do not replace the need for in-person interactions but make in-person interactions more valuable. Since consumers are already connected in the virtual world, in person relationships can be built at a rapid pace because they have already interacted with the person previously in the virtual environment.

### 3.2 Use of Online Reviews through the Social Networks:

In the recent days as we have savvy consumers, who do their own research by looking into various websites, online reviews of the product before they reach the retail outlets. Also, from the research study of Jon Reed, we understand that the marketing people should think of the buyer's community and not only on the buyer's network. Reed has also said buyers are always not buying and learning from the purchases they have made. So, the organisations should always not focus on the target customers but focus on the community of the customers.

According to Christy M.K. Cheung, the reviews of the online customers have a great impact on the buying behaviour of the customers and it needs to be handled in a suitable manner to improve the sales of the product.

As a result, the old 'buyer's purchasing journey has given way to more realistic models that accounts to reality. Due to this the prospects of the buyers are no longer very smooth and predictable. So, the organisations should develop an appropriate trust networks of experts inside and outside of the company to handle the informed buyers.

### **CONCLUSION**

From the above review, we can understand that the organisations have to adopt various upcoming strategies as per the changing technology and the customer needs to have a strong root base for the future growth of the organisation. Artificial Intelligence is one kind of strategy where the businesses were just initially using machines for redundant jobs, but as the development in the technology it is widely used in various areas where there is a dynamism in the input data and the decisions are to be made appropriately as per the changing inputs.

Even though CSR is one kind of very old strategy, nowadays the customers have started to do research about the various responsibilities the corporate organisations have towards the society because of the growing environmental and socio-economic concerns.

Social Media marketing is having a rising acceptance in the youths, because of the smart phone usage. All the organisations should consider this strategy, as the word of mouth through the electronic media is not only transferred to their networks but to the community as a whole. Hence the influence of the electronic word of mouth has more impact on the people before the buying decision when compared to the traditional buying behaviour activity. If the organisation fails to change their business strategies in correlation with the recent trends, then the organisation will be forced to face various pitfalls in their business.

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**A STUDY ON KEY FINANCIAL PERFORMANCE INDICATORS OF A COMPANY**

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**ABSTRACT**

*The objective of the study was to identify the key financial performance indicators through financial analysis for the period of 2012-13 to 2016-17 and to study the contribution of key financial performance indicators in company's profitability. The research is done with the help of analytical research method. On the basis of data collected the researcher has used the Anova test to check the company's profitability of the business. The study concludes that the Capital Structure, Liquidity, Operational Efficiency, Managed Profitability are the Key Financial Performance Indicators. The Key Financial Performance Indicators as stated above are based on the various financial analysis employed such as comparative analysis, common-size analysis, trend analysis and ratio analysis. Further by examining the mean variances among the group ratios it can be understood that all the financial variables for a specific group do differ significantly to contribute in company's profitability*

*Keywords: Key Financial Indicators, Financial Performance, Financial Analysis.*

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**INTRODUCTION**

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenue. This term is also used as general measures of a firm's overall financial health over a given period of time and can be used to compare similar firms across the same industry. Key Financial Performance Indicator is the tool to evaluate the performance of the organization in order to get more profitability for the business. It is to evaluate the success of a particular activity. For e.g. A school might consider the failure rate of its students as a key performance indicator which might help the school understand its position in its educational community, whereas a business organization may consider the percentage of income from returning the customers as a potential KPIs.

A Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs at multiple levels to evaluate their success at reaching targets. High-level KPIs may focus on the overall performance of the enterprise, while low-level KPIs may focus on processes or employees in departments such as sales, marketing or a call center. A very common way to choose KPI is to apply a management framework such as balance scorecard. KPIs evaluate the success of an organization or of a particular activity such as projects, programs, products, etc.

Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage. Financial performance emphasizes on variables related directly to financial report. It is a set of Quantifiable measures that the company uses to gauge its performance overtime. Companies use this tool to determine a company's progress in achieving its Profit and to perform against other business within the Industry.

**PROBLEM STATEMENT**

Financial Performance analysis is important to know the business health. Better the financial performance better the business health. There are various tools used to assess the financial health of an organization. Like common Size statement, Trend Analysis Ratio analysis etc. Using these tools various inference can be drawn. But the Key Performance Indicators can help the organization in better financial management if identified and managed properly. Thus the Researcher attempted the study to identify the Key Financial Performance Indicators through Ratios and ANOVA test.

**OBJECTIVES OF THE STUDY**

The research is intended to study the Key financial performance indicators following are the research objectives:

1. To identify the key financial performance indicators through financial analysis for the period of 2012-13 to 2016-17.
2. To study the contribution of key financial performance indicators in company's profitability.

**RESEARCH METHODOLOGY**

**Research Design:** In the view of the objectives of the study listed above, Descriptive research design was adopted for the present study. Descriptive research is used to describe the characteristics of a population or

phenomenon being studied and focuses on more of what of the research subject rather than the why of the research subject.

- ✚ **Sources of Data:** The study is based on the data collected from a company situated at UT of DNH, India; (i.e. Balance sheet, Profit and Loss Account of 5 years).
- ✚ **Tools of Analysis:** The data collected for the study was analyzed logically and meaningfully to arrive at meaningful conclusions. The following are the tools that were applied for data analysis in the present study.
- ✚ **Financial Tools:** current ratio, liquid ratio, cash position ratio, debt equity ratio, interest coverage ratio, total debt ratio, inventory turnover ratio, Debtors Turnover Ratio, Assets Turnover ratio, Net working turnover ratio, Operating Profit Ratio, Return on Assets, Return on Equity, Return on Investment.
- ✚ **Statistical Tool:** Analysis of Variance that is **Anova test** was used in the study.
- ✚ **Limitation of the Study:** The research has only identified the key financial performance indicators and gauged the variability among the indicators. The study does not have quantitative measure for contribution in profitability.

**Hypothesis:** *The Researcher attempted to study the dynamism among the key ratios those contribute in company's profitability. Thus by examining the mean variances among the group ratios it can be understood that do all the variables for a specific group contribute equally or they have been differing significantly.*

*The Researcher had set following hypothesis for the study:*

#### **Hypothesis No. 1**

H<sub>0</sub>: Liquidity ratios do not differ significantly to contribute in company's profitability.

H<sub>1</sub>: Liquidity ratios do differ significantly to contribute in company's profitability.

#### **Hypothesis No. 2**

H<sub>0</sub>: Solvency ratios do not differ significantly to contribute in company's profitability.

H<sub>1</sub>: Solvency ratios do differ significantly to contribute in company's profitability.

#### **Hypothesis No. 3**

H<sub>0</sub>: Efficiency ratios do not differ significantly to contribute in company's profitability.

H<sub>1</sub>: Efficiency ratios do differ significantly to contribute in company's profitability.

#### **Hypothesis No. 4**

H<sub>0</sub>: Profitability ratios do not differ significantly to contribute in company's profitability.

H<sub>1</sub>: Profitability ratios do not differ significantly to contribute in company's profitability..

## **ANALYSIS AND DISCUSSION**

### **Liquidity Position**

A liquidity ratio is an indicator of whether a company's current assets will be sufficient to meet the company's obligations when they become due. The liquidity ratios include the current ratio, Liquid Ratio, Cash Position ratio. Liquidity ratio are a class of financial metrics used to determine a debtor's liability to pay of its current debt obligations without raising external capital. The Table 1 exhibits the three basic ratios of the test of the liquidity, Viz, Current ratio, Quick Ratio, Cash position Ratio. The ratio are as per the month from 2013 to 2017.

**Table-1: Liquidity Position**

<b>Liquidity Ratios:</b>	<b>M-13</b>	<b>M-14</b>	<b>M-15</b>	<b>M-16</b>	<b>M-17</b>
Current Ratio	1.09	1.16	1.27	1.73	2.28
Liquid Ratio	0.67	0.75	0.79	1.09	1.61
Cash Position Ratio	0.04	0.04	0.05	0.13	0.77

Over the 5 years of period the current ratio as well as liquid ratio has improved to the generally related standard ratios as 2:1 for current ratio and 1:1 for liquid ratio. The cash position ratio also has a good improvement and the ratio for March 2017 reveals that the company has 77 paise as the liquid asset per rupee of current asset.

**SOLVENCY POSITION**

A solvency ratio measures the extent to which assets covers commitments of future payments, the liabilities. It is also a key metrics to measure an enterprise's ability to meet its debt and other obligations. The lower the company's solvency ratio, the greater the probability that it will default on its debt obligations.

The Table 2 also exhibits the three basic ratios of the test of the Solvency, Viz, Debt Equity Ratio, Total Debt Ratio, Interest Coverage Ratio. The ratio are as per the month from 2013 to 2017.

**Table-2: Solvency Position**

<b>Solvency Ratios:</b>	<b>M-13</b>	<b>M-14</b>	<b>M-15</b>	<b>M-16</b>	<b>M-17</b>
Debt Equity Ratio	0.41	0.26	0.11	0.07	0.06
Total Debt Ratio	0.36	0.28	0.19	0.16	0.15
Interest Coverage Ratio	2.16	3.14	4.53	6.95	12.70

The debt to equity ratios indicates that the debt is getting reduced year on year and it signifies that there is very low long term debt financing in the company. Total debt ratio indicates that for every rupee of shareholders fund in March 2017 the company had 15 paise of external equities. This have reduced over the period of time it was 36 paise in March 2013. Interest Coverage ratio has improved and in March 2017 the company had capacity of paying to the external creditors by 12.70 times.

**SOLVENCY POSITION**

Solvency position is the degree to which the current assets of an individual or entity exceeds the current liabilities of that individual or entity. Solvency can also be described as the ability of a corporation to meet its long term fixed expenses and to accomplish long term expansion and growth. The Table 3 exhibits the three ratios of the test of Solvency ratio Viz, Debt Equity Ratio, Total Debt Ratio, Interest Coverage Ratio. The ratio as per month 2013-2017

**Table-4: Profitability Position**

<b>Solvency Ratios:</b>	<b>M-13</b>	<b>M-14</b>	<b>M-15</b>	<b>M-16</b>	<b>M-17</b>
Debt Equity Ratio	0.41	0.26	0.11	0.07	0.06
Total Debt Ratio	0.36	0.28	0.19	0.16	0.15
Interest Coverage Ratio	2.16	3.14	4.53	6.95	12.70

**PROFITABILITY POSITION**

Profitability is the ability for a business to earn profit. A profit is simply the revenue left after you have paid all the cost and expenses related to your business activities. Profitability ratios are the series of metrics that you can use to measure the relative profitability of a business.

The table No. 4 exhibits the four ratios of the test of Profitability ratio Viz, Operating Profit Ratio, Return on Assets, Return on Equity, Return on Investment. The ratio as per month 2013-2017.

**Table-4: Profitability Position**

<b>Profitability Ratios:</b>	<b>M-13</b>	<b>M-14</b>	<b>M-15</b>	<b>M-16</b>	<b>M-17</b>
Operating Profit Ratio	13%	14%	14%	15%	17%
Return on Assets (ROA)	5%	7%	8%	10%	11%
Return on Equity (ROE)	12%	16%	15%	16%	17%
Return on Investment (ROI)	19%	23%	26%	24%	25%

All the ratios are indicating the improvement and are having better ratios.the operating profit in the year 2013 was 13% and in the year 2017 has improved to 17%. Return on asset have also improved to 5% to 11% . Return on Equit before in the year 2013 it was 12% and has increased to 17% in the year 2017. Return on Investment has 25% of increase in 2017 that of 2013 that is 19%.

**THE CONTRIBUTION OF KEY FINANCIAL PERFORMANCE INDICATORS IN COMPANY'S PROFITABILITY**

The set of identified ratios in section of ratio analysis were used for Anova Test. The Anova test was used as the Researcher intends to study the variance among the group ratios. All the group ratios: Liquidity, Solvency, Efficiency and Profitability have almost indicated favourable financial performance. But it should be analyzed if



the mean ratios within the groups have equally contributed or there have been the variance among them. Thus following analysis is made:

**Hypothesis No. 1: Liquidity Ratios**

H0: Liquidity ratios do not differ significantly to contribute in company’s profitability.

H1: Liquidity ratios do differ significantly to contribute in company’s profitability.

SUMMARY						
Groups	Count	Sum	Average	Variance		
Current Ratio	5	7.5252	1.5050	0.2520		
Liquid Ratio	5	4.9108	0.9822	0.1497		
Cash Position Ratio	5	1.0245	0.2049	0.1000		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.2798	2	2.1399	12.7941	0.0011	3.8853
Within Groups	2.0071	12	0.1673			
Total	6.2869	14				

The above table shows that calculated value of F is 12.7941 which is greater than the F critical value of 3.8853 at 5% level with d.f. being v1=2 and v2=12 and hence the analysis rejects the null hypothesis of no difference in sample mean (p value >.05).

Thus it can be said that Liquidity ratios do differ significantly to contribute in company’s profitability.

**Hypothesis No. 2: Solvency Ratios**

H0: Solvency ratios do not differ significantly to contribute in company’s profitability.

H1: Solvency ratios do differ significantly to contribute in company’s profitability

SUMMARY						
Groups	Count	Sum	Average	Variance		
Debt Equity Ratio	5	0.9104	0.1821	0.0223		
Total Debt Ratio	5	1.1403	0.2281	0.0080		
Interest Coverage Ratio	5	29.4858	5.8972	17.7178		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	108.0053	2	54.0026	9.1281	0.0039	3.8853
Within Groups	70.9927	12	5.9161			
Total	178.9979	14				

The above table shows that calculated value of F is 9.1281 which is greater than the F critical value of 3.8853 at 5% level with d.f. being v1=2 and v2=12 and hence the analysis rejects the null hypothesis of no difference in sample mean (p value >.05). Thus it can be said that Solvency ratios do differ significantly to contribute in company’s profitability.

**Hypothesis No. 3: Efficiency Ratio**

H0: Efficiency ratios do not differ significantly to contribute in company’s profitability.

H1: Efficiency ratios do differ significantly to contribute in company’s profitability.

SUMMARY				
Groups	Count	Sum	Average	Variance
Inventory Turnover Ratio	5	15.8053	3.1611	0.0360

<b>Debtors Turnover Ratio</b>	5	27.8418	5.5684	2.7753
<b>Assets Turnover Ratio</b>	5	4.7917	0.9583	0.0099
<b>Net Working Capital Turnover</b>	5	63.2041	12.6408	83.9442

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
<b>Between Groups</b>	385.3312	3	128.4437	5.9214	0.0065	3.2389
<b>Within Groups</b>	347.0617	16	21.6914			
<b>Total</b>	732.3929	19				

The above table shows that calculated value of F is 5.9214 which is greater than the F critical value of 3.2389 at 5% level with d.f. being  $v_1=3$  and  $v_2=16$  and hence the analysis rejects the null hypothesis of no difference in sample mean ( $p$  value  $>.05$ ). Thus it can be said that Efficiency ratios do differ significantly to contribute in company’s profitability.

**Hypothesis No. 4**

H0: Profitability ratios do not differ significantly to contribute in company’s profitability.

H1: Profitability ratios do differ significantly to contribute in company’s profitability.

SUMMARY				
Groups	Count	Sum	Average	Variance
<b>Operating Profit Ratio</b>	5	0.72718	0.14544	0.00024
<b>Return on Assets (ROA)</b>	5	0.41081	0.08216	0.00061
<b>Return on Equity (ROE)</b>	5	0.74869	0.14974	0.00039
<b>Return on Investment (ROI)</b>	5	1.16982	0.23396	0.00060

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
<b>Between Groups</b>	0.0582	3	0.0194	42.2808	0.0000001	3.2389
<b>Within Groups</b>	0.0073	16	0.0005			
<b>Total</b>	0.0655	19				

The above table shows that calculated value of F is 42.2808 which is greater than the F critical value of 3.2389 at 5% level with d.f. being  $v_1=3$  and  $v_2=16$  and hence the analysis rejects the null hypothesis of no difference in sample mean ( $p$  value  $>.05$ ). Thus it can be said that Profitability ratios do differ significantly to contribute in company’s profitability.

**FINDINGS**

1. The study reveals that the Key Financial Performance indicators are :
  - a. Capital Structure: More of Equity Less of Debt.
  - b. Liquidity: Improved over the years.
  - c. Operational Efficiency: Through generating good revenues.
  - d. Managed Profitability: Through cost control.
2. All the group ratios do differ significantly to contribute in company’s profitability. Thus there exists the dynamism in various financial variables hence better control over the key financial indicators can take the company to new heights.

**CONCLUSION**

The study concludes that the Capital Structure, Liquidity, Operational Efficiency, Managed Profitability are the Key Financial Performance Indicators of the company. The Key Financial Performance Indicators as stated above are based on the various financial analysis employed such as comparative analysis, common-size

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analysis, trend analysis and ratio analysis. Further by examining the mean variances among the group ratios it can be understood that all the financial variables for a specific group do differ significantly to contribute in company's profitability.

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**COMPARATIVE ANALYSIS OF DIVESTMENT STRATEGIES OF PUBLIC SECTOR UNITS WITH SPECIAL REFERENCE TO BSNL****Prof. Amita Agrawal<sup>1</sup> and Prof. Neha Agrawal<sup>2</sup>**Assistant Professor<sup>1</sup>, Kautilya Institute of Management & Research  
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**ABSTRACT**

*After independence India adopted the mixed economic system. The main feature of the mixed economic system was the co-existence of public and private entities together for economic development. There was a radical change in government's policy towards the public sector in 1991 after the new industrial policy was adopted. In this policy role of public sector units was reduced. Only eight industries were reserved for public sector and if need arises private sector will be allowed to enter into these sectors. But the financial performance of public sector units has to be taken into consideration. The Public Enterprises Survey 2017-18, revealed that the top ten loss making PSUs claimed 84.71 per cent of the total losses made by all the 71 CPSEs. Out of these PSU's BSNL is continuously making losses over last few years due to which it's high time that government should take a decision to revive or close this PSU. This paper studies the possible strategies BSNL may follow to come out of crisis.*

*Keywords: Public Sector unit, Strategic disinvestment, Financial Support, Closure*

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**I. INTRODUCTION**

Bharat Sanchar Nigam Limited is India's major public sector undertaking established in year 2000 is with its headquarters in Delhi. It is the largest provider of fixed telephony and broadband services listed as fourth largest mobile telephony provider in India. Initially it provided many good schemes with landlines to lower down the rates of calling and was widely accepted. But after revolution in prices of mobile phones and dip in tariff plans by various telecom giants the revenues of BSNL has declined.

The company is facing stiff competition after entry of Reliance Jio and has dented revenues and deepened losses. Due to quality issues of BSNL and Jio's aggressive marketing strategy and aggressive tariff plan, Companies revenue declined by 18% during the year 2018-19. The company chairman recently made a presentation to the telecom secretary giving details of financial position of PSU.

The government has few options to be applied on PSU i.e, strategic disinvestment of BSNL, closure or revival with financial support.

**II. LITERATURE REVIEW**

**J. Pavithra (2011)** has done comparative study of balance sheets of BSNL and found that revenue policies of BSNL are not properly implied and that's why company suffered losses.

**Anshu Gupta (2015)** in his Research Article —Financial Performance Evaluation of Telecommunication with special reference to BSNL concluded that the BSNL follows aggressive policy of managing liquidity & company has sufficient liquidity assets to satisfy its short term liabilities but after studying the five years balance sheets of BSNL and all conditions, the author concluded that BSNL is facing the capital problem because of which financial position of BSNL are affected. The profits of the company are decreasing year by year due to maintaining high liquidity.

**B. Sudhakar Reddy (2016)** in research paper “ Budget process in Telecom Sector” stated that the key factors in effective revenue realization like delay in customer billing ,non- availability of uniform database , time lag between calls generated has led to decrease in BSNL's revenue.

**Megha Gaste (2017)** in research paper “Financial performance of Telecom Companies” stated that ROCE return on capital employed is low for BSNL as compared to other companies.

**Jagdeesh Kumar B (2018)** in research paper “ Industrial Relations in BSNL”: AN Insight found that unions say that BSNL continued to be the loss making unit because of policies imposed by government of India like not allowing procurement of 3G equipment's for network expansion from 2006 to 2012.

**III RESEARCH METHODOLOGY**

This research paper is based on case study method which has always been encouraged by the researchers in the past. This paper studies the case of Reliance-IPCL merger which is successful case showing profits after its divestment. This paper also takes into consideration other successful mergers of public sector units making profit after divestments.

**IV CASE STUDY: LOSSES MADE BY BSNL IN LAST THREE YEARS**

The following chart shows financial performance of BSNL for the last three years in terms of revenue generated and losses occurred.



Source: Times of India, Pune, 13<sup>th</sup>Feb 2019

The graph shows that revenue of BSNL was 32,411Cr in 2015-16, 31,533Cr in 2016-17 which reduced to 27,818Cr in year 2017-18. So there was 11.78% decrease in revenues. This ends in loss of 7992 Cr in the year 2017-18.

**V. CASE STUDY ANALYSIS AND SUGGESTED STRATEGIES FOR BSNL**

The government of India can consider three strategies for BSNL : **Strategic Divestment, Closure, Providing financial support to BSNL** which are evaluated as follows:

**A. Strategic Disinvestment**

Strategic sale of a PSU is different from the ordinary disinvestment. This is because in the case of strategic sale, the control and a significant proportion of a PSU’s share goes to a private sector strategic partner. According to the Department of Disinvestment, this type of transaction involves two process: First is some portion of shares are sold to strategic partner and Second is Management Control is transferred to Strategic Partner.

Disinvestment and privatization are different from each other. In privatization there is change in ownership that into change in management of the company. But disinvestment does not always mean change in management. Disinvestment is the dilution of the stake of the government in a public enterprise.

Earlier also the government has taken decisions for PSU’s like IPCL, Hindustan Zinc, BALCO , AIRINDIA etc which proved to be effective.

**1. Study of Reliance- IPCL Divestment**

The reliance-IPCL merger came into effect on 1st April, 2006.RIL bought a 26% stake in IPCL in the year 2002.

**Highlights of Quarter’s Performance of Reliance Industries Limited for year ended 30th September 2018.**

- Revenue increased by 54.5% to 156,291 crore (\$ 21.6 billion)
- PBDIT increased by 24.9% to 22,359 crore (\$ 3.1 billion)
- Profit Before Tax increased by 16.4% to 13,198 crore (\$ 1.8 billion)
- Cash Profit increased by 17.8% to 15,510 crore (\$ 2.1 billion)
- Net Profit increased by 17.4% to 9,516 crore (\$ 1.3 billion)

Source: Press Release of RIL, Mumbai, 17<sup>th</sup> October 2018

If we study post merger performance of Reliance-IPCL and study major profitability ratios of the company all are showing a common trend. At the time of recession in the economy during year 2008 where there is a sharp fall in curves all other years they have been increasing showing good financial health of the company.

**RECOMMENDATION**

Government if opts for this option can allow entry of some private player in running BSNL. It is because the basic infrastructure of company is very strong. The average share of spectrum, the essential resource for providing mobile services, held by BSNL is about 20 per cent in a circle, which is significantly more than that held by most of the private telcos. The number of cell sites and associated Base Transceiver Stations (BTS) of the combine is more than 70,000, comparable to some of the leading telcos.

This may led to improve in condition of PSU as the control will pass to strategic partner which may introduce new policies and remove age old practices of BSNL which were leading to losses.

**B. Closure**

Closure means shutting down operations of the company which is not a viable option as the company's strong fixed assets and huge employee strength will go waste as liquidation leads to selling of all business assets. Also BSNL operating strategies were at fault as evident from literature review so closure cannot be a solution.

**C. Revamping by providing Financial Support**

Going with this option of infusing funds from government to sustain operations is not the only strategy that can be followed as already loss making company will absorb more funds and it will set a trend for other PSUs that government is always there to support.

**VI. CONCLUSION**

From the above study I conclude that BSNL is major PSU based on telecom industry which needs a strategic survival as it has good fixed assets and the future of telecom industry is wide and profitable. The strategic divestment option is most suitable that can be opted as being evident from previous cases of PSU's merger and divestment strategies. Also to keep focus on continuous reputed image of the company divestment can be useful.

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**TO IMPROVE PRODUCTIVITY BY REDUCING CYCLE TIME IN A CRANKSHAFT MACHINING**

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**ABSTRACT**

*Since in today's competitive world the customer requirements are changing dynamically, manufacturers have to cope up to customer expectations. The rigid manufacturing system and job specialization are no longer responsive enough to meet rapidly changing customer demands. A reliable, responsive, flexible, short lead time manufacturing system producing lower cost products is a key weapon in the today's manufacturing.*

*"Cycle time includes process time during which a unit is acted upon bring it closer to an output and delay time during a unit of work is spent waiting to take the next time action" The period required to complete one cycle of operation or to complete a function job or task from start to finish. Cycle time is used in differentiating total duration of process from the run time. For job no. 3425 (crankshaft) finish bore operation to be combined with flange end drilling and tapping operation on HMC machine which helps to reduce manual and skilled work. Reducing tooling cost with the help of modifying the milling cutter and insert for bevel milling operation for job no 2267 (crankshaft) on vertical machining center (VMC). Job no 3230 (crankshaft) oil hole drilling cycle time reduction by reducing the non-cutting time, modifying the tool length (drill), optimizing the cutting parameters and accordingly modifying the program.*

*The idea of this project is to identify the bottleneck operations and reduce the cycle time which helps to meet the customer demands & reduce the manufacturing cost through process improvement.*

*Keywords: Cycle time, Cutting parameters, MRR- Material removal rate, Productivity Improvement, Tool life.*

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**1. INTRODUCTION**

The manufacturing industry is constantly striving to decrease its cutting costs and increase the quality of the machined parts as the demand for high tolerance manufactured goods is rapidly increasing. The increasing need to boost productivity, to machine more difficult materials and to improve quality in high volume by the manufacturing industry has been the driving force behind the development of cutting tool materials. Numerous cutting tools have been developed continuously since the first cutting tool material suitable for use in metal cutting, carbon steel, was developed a century ago. Nowadays, aerospace, power generation, oil and gas, marine, and medical industries are among rapidly developing business which plays an important role in almost every aspects of the human's life as well as the global economy. Due to their inherent nature, the majority of mechanical parts employed in these industries are usually used in severe climate conditions. Structural parts of aircrafts' fuselage, components of jet engines, blades of compressors and turbines, combustion chambers, and exhaust nozzles are among several examples of such components.

Typical material to be used in these applications must possess wide range of desirable properties which include but not limited to low density and high specific strength to weight ratio especially at elevated temperature, resistance to corrosion, and chemical inertness.

**What is Cycle Time Reduction?**

Cycle Time Reduction focuses on minimizing the amount of time spent on the entire product development cycle – from operation start to finish. Cycle Time Reduction is being applied to all types of products,

**Bottleneck operation** is the operation takes the maximum time to complete its operation among all the operations.

**Process improvement** can be done by modifying the sequence of operations, process parameters, adding or removing the operation or combining the operations with maintaining the quality, productivity, cost and delivery

**Common methods to reduce cycle time**

There are several efforts suitable for reducing cycle times. Streamlining multiple efforts, however, can yield a much more efficient process resulting in cost and time savings and customer satisfaction. When reducing process cycle time, consider a combination of the following ideas.

**Perform activities in parallel.** Most of the steps in a business process are often performed in sequence. A serial approach results in the cycle time for the entire process being the sum of the individual steps, not to mention

transport and waiting time between steps. When using a parallel approach, the cycle time can be reduced by as much as 80% and produces a better result.

A classic example is product development, where the current trend is toward concurrent engineering. Instead of forming a concept, making drawings, creating a bill of materials, and mapping processes, all activities take place in parallel by integrated teams. In doing so, the development time is reduced dramatically, and the needs of all those involved are addressed during the development process.

**Change the sequence of activities.** Documents and products are often transported back and forth between machines, departments, buildings, and so forth. For instance, a document might be transferred between two offices a number of times for inspection and signing. If the sequence of some of these activities can be altered, it may be possible to perform much of the document's processing when it comes to a building the first time.

**Reduce interruptions.** Any issue that causes long delays and increases the cycle time for a critical business process is an interruption. The production of an important order can, for example, be stopped by an order from a far less valuable customer request--one that must be rushed because it has been delayed. Similarly, anyone working amidst a critical business process can be interrupted by a phone call that could have been handled by someone else. The main principle is that everything should be done to allow uninterrupted operation of the critical business processes and let others handle interruptions.

**Improve timing.** Many processes are performed with relatively large time intervals between each activity. For example, a purchasing order may only be issued every other day. Individuals using such reports should be aware of deadlines to avoid missing them, as improved timing in these processes can save many days of cycle time.

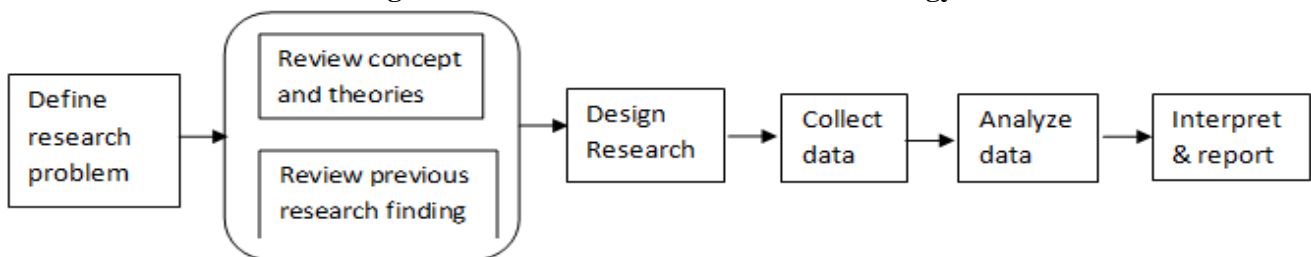
## 2. OBJECTIVE OF THE STUDY

- To study the process improvement and to achieve productivity, quality and cost effectiveness
- To make an improvement in productivity by reducing in cycle time from present cycle time.
- To meet the customer quality compliance and reduction of customer complaints.
- To reduce the manufacturing cost per crankshaft by the proper selection and modification of tool

## 3. RESEARCH METHODOLOGY

Adoption of appropriate methodology is an essential characteristic of quality research studies irrespective of the discipline with which they are relative methodology provides a way and guiding principles for research. It is defining and redefining and evaluating data making deduction and giving conclusion

**Fig no-3.1: Flow chart of research methodology**



**Definition of problem statement-** During the initial days of internship yet was notice that all the work procedures were running smoothly, but there was much scope for improvement, in some accept of the procedures. Much of the valuable production time was lost in non-value adding procedures.

### DATA COLLECTION

#### Primary source

- Data is collected by interviewing the employees at various levels in the factory.
- Data related to project purpose is also collected by discussing with the department head of the maintenance, machine and production department.

#### Secondary source

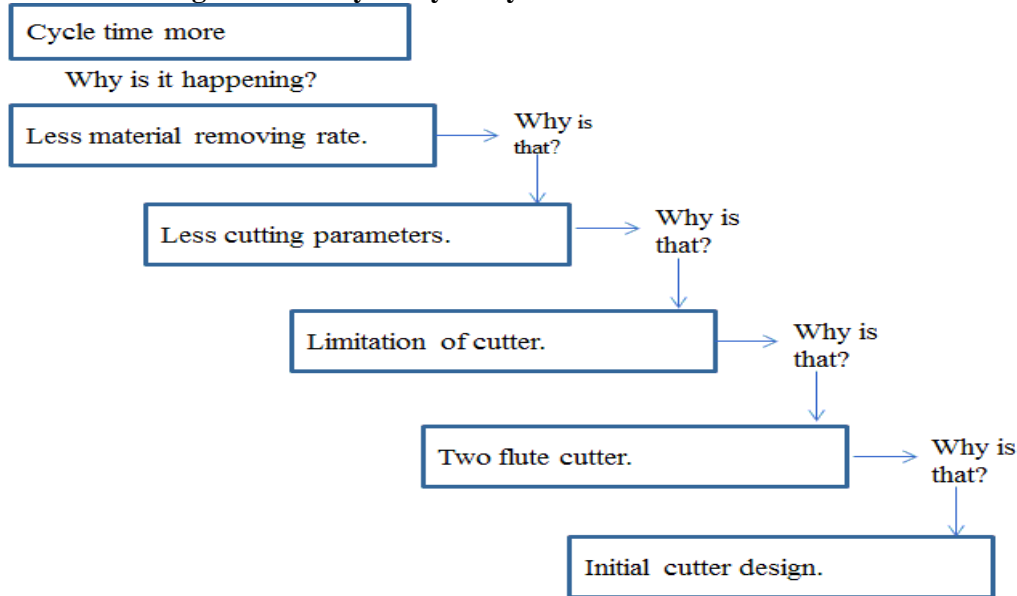
- Through the previous and current company record such as stock register, material issue receipts, maintenance record, monthly maintenance reports, book and website used to collect data.



**4. DATA ANALYSIS FOR MILLING OPERATION**

The possible causes for the high cycle time has been analyzed through Cause and Effect diagram are the existing type of cutting tool used, cutting parameters used, CNC program, Spindle run-out, Fixture clamping, Clamping pressure, Tool holding problem, Low skilled operator, job clamping pressure, Double pass of cutter etc

**Fig no-4.1: Why- Why analysis for Material Removal Rate**



**• Recommendation and Action**

All the above three combinations can help to reduce the cycle time by saving the tool change time and the cutting time of operation. However following points are considering for the selection of the best combination.

- 1) Cutting depth, 2) Cutting load, 3) Cutting parameters, 4) Special tool or Can be reuse, 5) Easy for Manufacturer, 6) Cost of tool, 7) Quality of end product

Based on the above points and as described below combination no 3 is found to be the most suitable.

**• Background of operation**

This is a special operation for this part no. (D3543) i.e crankshaft. Purpose of this operation is to avoid the fouling of nozzle with crankshaft pin bevel forge face in crank case while rotating. Existing production is 100 nos. per day for this job D.no.3543. This is a bottleneck operation with cycle time for this operation is 12.5 min. & rest of all operation can produce 115 nos. per day. This operation is carried out on Vertical Machining center (VMC) for milling of web no. 2, 4, 6,8,10 & 12.

The floor to floor cycle time of all the operations and indicating the bottleneck operation of bevel milling with 12.5 min. This operation is shown highlighted in the figure.

To perform this operation on Vertical Machining Center the special milling cutter of 30 degree with 2 flute cutter used with BT40 holder with provision of side lock . XDKT insert is used for this operation. For this cutter XDKT inserts used for cutting. Figure 4.2 shows the details of XDKT150508 insert.



**Fig no-4.2: Previously used XDKT150508 insert and cutter**

The insert code XDKT150508 indicates the following details.

X- Special, D- Diagonal shape of insert, K- Tolerance class for corner point, T- Cylindrical hole with chip breaker at double side, 15- Length of the insert in mm (i.e. 15 mm)

05- Thickness of the insert in mm (i.e. 05 mm), 08- Radius of corner in mm (i.e.0.8 mm).

This is a special operation for this job number D3543 the crankshaft. Purpose of this operation is to avoid the fouling of nozzle with crankshaft pin bevel forge face in crank case while rotating. Existing production is 100 nos. Per day for this job D.no.3543. This is a bottleneck operation with cycle time for this operation is 12.5 min. & rest of all operation can produce 115 nos. per day. This operation is carried out on Vertical Machining center (VMC) for milling of web no. 2, 4, 6,8,10 & 12.

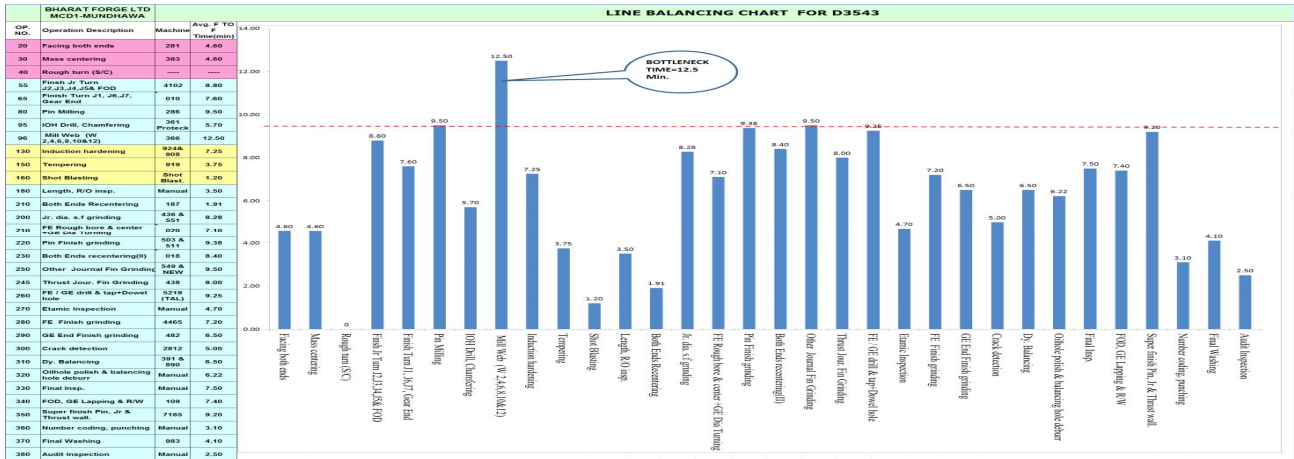


Fig no-4.3: Cycle time chart for job no. D3543

**Theoretical calculation for the approximate Material Removal Rate (MRR) with existing cutter**

For calculating MRR required parameters spindle revolution per minute, cutter diameter, depth of cut, width of cut, feed rate of cutter are used.

Spindle RPM (N) = 700

Cutter dia. (D) = 50 mm

Cutting Speed (VC) =  $\pi * D * N / 1000$

=  $\pi * 50 * 700 / 1000$

= 109 m/min

Material Removing Rate (MRR) =  $w * d * F$

=  $15 * 2.5 * 100$

=  $3750 \text{ mm}^3/\text{min}$ .

Where F = Feed rate , w= Width of cut, d= Depth of cut

Details of various points considered while performing the operation with existing cutter and its observations are listed in Table 4.1

**Table-4.1: Results on Existing Cutter**

Sr. No.	Points Considered	Results
1	Cycle time (Floor to Floor)	12.5 min.
1.1	Cutting time	11.0 min
1.2	Non Cutting time	1.5 min
1.3	Productivity at 85% per Day	89 nos.
2	Cutting tool	Special tool
2.1	Type of locking	Side lock
2.2	No of flute	2
2.3	Type of insert	XDKT 150508
2.4	No of inserts used on cutter	6
3	Cutting speed	109 m/min.
3.1	Spindle RPM	700
3.2	Feed	100mm/min.
4	Depth of cut	2.5 mm
5	M.R.R.	$3750 \text{ mm}^3/\text{min}$
6	Load monitoring.	

6.1	Spindle	16%
6.2	“B” Axis	23%
7	Quality	1)Poor finish, 2)Heavy step observe
8	Life of set of insert	100 jobs.
9	Any Breakage of cutter & insert.	Yes
10	Insert cost per job (Rs.)	23.4

After studying Table 4.1 it is observed that this gives the poor finish as well as the heavy steps observed on the milling face. The life of the one set of six inset is 100 no’s and the cost of insert per component is **Rs. 23.40**. the cycle time is 12.5 min. Floor to floor per component for bevel milling operation The output of 89 nos. At 85% per day with 2 flute XDKT insert with 700 RPM and 100mm / min feed rate. This is not meeting the current requirement of 115 nos. Per day of customer and this is not acceptable.

**Why-Why analysis for Material Removal Rate**

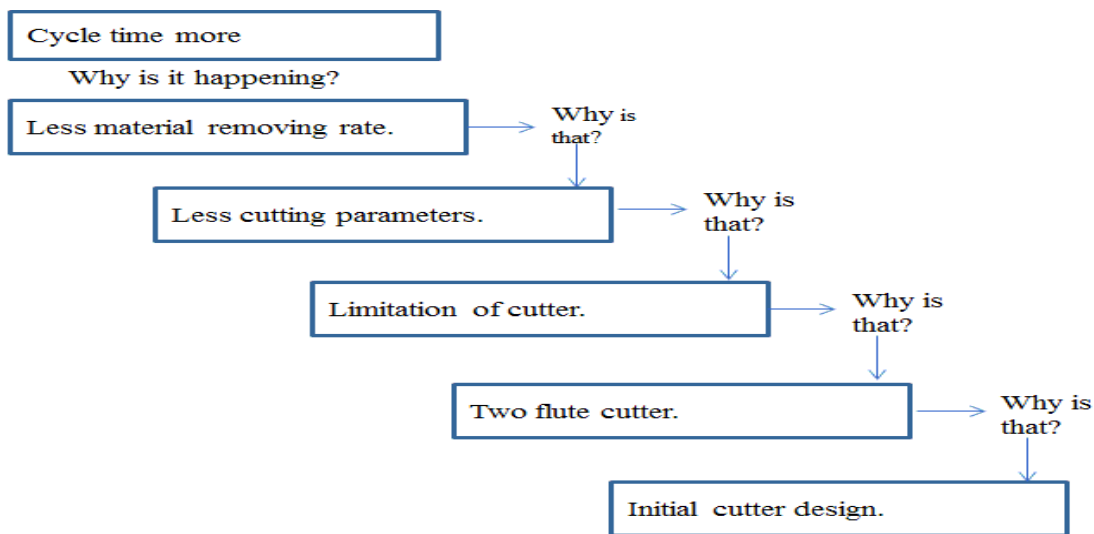


Fig no-4.4: Why-Why analysis for Material Removal Rate

After the analysis it has been decided that to modify the existing cutter from 2 flutes to 4 flutes with central locking in holder & increase the cutting parameters which helps to increase the MRR with maintaining the quality which can give direct benefit in reducing the cycle time. At the same time it has been thought about the reduction in non-cutting time and optimizing of cutting parameters. Based on the above analysis discussed these points with the tool manufacturer and finalized the cutter.

Figure 4.5 shows the new modified cutter and insert.

**New modified Cutter and Insert for the new cutter**

Special insert used for new cutter is shown in figure 4.5



Figure-4.5: New XPHT 160412 insert and cutter

The insert code XPHT160412 indicates the following details.

- X- Special insert, P- Clearance angle, H-Tolerance class for corner point, T-Shape of insert
- 16- Length of the insert in mm (i.e. 16 mm), 05- Thickness of the insert in mm (i.e. 04 mm)
- 12- Radius of corner in mm (i.e.1.2 mm).

**Theoretical calculation for the approximate material removal rate for new cutter**

For calculating MRR required parameters spindle revolution per minute, cutter diameter, depth of cut, width of cut, feed rate of cutter are used.

$$\begin{aligned}
 \text{RPM (N)} &= 1200 \\
 \text{Cutter dia. (D)} &= 50 \text{ mm} \\
 \text{Cutting Speed (Vc)} &= \pi * D * N / 1000 \\
 &= \pi * 50 * 1200 / 1000 \\
 &= 188 \text{ m/min} \\
 \text{Material Removing Rate (MRR)} &= w * d * F \\
 &= 16 * 2.5 * 150 \\
 &= 6000 \text{ mm}^3/\text{min.}
 \end{aligned}$$

Where F=Feed rate , w=Width of cut, d=Depth of cut

After conducting the trial the data is tabulated in Table 4.2, which shows the comparison between the old cutter and the new cutter in respect of cycle time, productivity, quality, cost, life of insets and the parameters used.

**Table-4.2: Comparison point wise in old cutter and new cutter.**

Sr. No.	Points Considered	Old	New
1	Cutter – Type	SPECIAL	SPECIAL
2	No. Of flutes – 2 nos.	2	<b>4</b>
3	No. Of Pockets – 6 nos.	6	8
4	No. Of edges – 2 nos.	2	2
5	Cost of insert	390	<b>490</b>
6	Cost of 1 set of insert	2340	3920
7	No. Of webs for machining – 6 nos.	6	6
	Vc ( m/min )	109	<b>188</b>
	N ( rpm )	700	1200
	F ( m/min )	100	150
8	Cycle Time (min)	12.5	<b>9</b>
9	Life - components/set of edge	50	120
10	Total Life - components/set of insert	100	<b>240</b>
11	Cutter breakages	4 nos.(2011-2012)	0(last 3 month)
12	Insert breakage –frequently	Frequently	0
13	Surface Finish – Poor & steps observed on milling face	Poor & heavy Steps on milled face	Good & Normal Steps on milled face
14	Productivity at 85%/Day	89	<b>123</b>
15	Cost/component (Rs)	23.4	<b>16.3</b>

**4.6 Regularization of new tool into production (Process Control)**

As per the result of the trial conducted, new cutter and the inserts are added in the process sheet of the bevel milling operation sheet.

• **Results with the new cutter**

The results discussed below are Quality results, Productivity results, Tool life results and tool cost results.

**A) Quality results**

The poor finish of milling and heavy step observed on milled face with old two flute cutter.

**Before**

No step on milled face and improvement in finish with the new four flute cutter.

**After**

**B) Productivity results**

Refer to the Table 4.2 the cycle time reduced from 12.5 min to 9 min. i.e. 39% Productivity improvement achieved for this operation. In Figure 4.6 indicates the graph of reduction in cycle time.

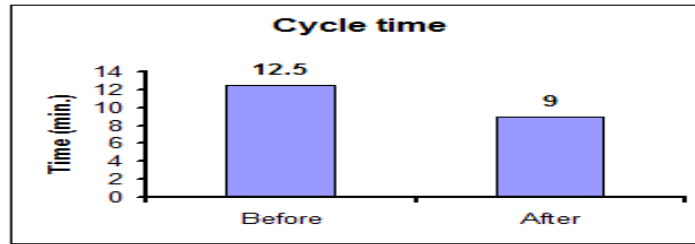


Fig no-4.6: Cycle time reduction graph

At the same time line capacity increased by 15 nos. Per day. Line contribution can increase by **Rs 90,000. Per day (i.e. 15\*6000=90,000)**

**C) Tool life results**

After conducting the different trials tool life established up to 240 nos. Per set of 8 inserts, this represents the increase in the tool life in terms of the number of job.

**D) Tool cost results**

Tool cost reduced by 31% (i.e. Rs.7.1 per component.) reduction in tool cost per piece for this operation from Rs.23.4 to Rs.16.3

With the help of using 4 flute milling cutter the capacity of line increased by 15% per day (i.e. 15 nos. Per day) at the same time life of insert increased by 140% per set of insert .The load on the spindle and “B” axis reduced by 40% . The improvement achieved by increasing material removing rate, reducing resultant cutting forces and eliminating shocks on the cutting tool.

The production schedule is of 14000 nos. Of job no 3543 and job no 3243.

With the use of old cutter and insert for making above 14000 nos the cost required for insert will be 14000\*23.4=Rs.3,27,600.

With the new cutter & insert cost will be 14000\*16.3=Rs.2, 28,200

Therefore the saving would be,

**Old cutter & Insert Price – New cutter & Insert Price = Saving**

**3, 27,600 – 2, 28,200 = Rs.99, 400**

For the year 2018-19 the saving will be of **Rs.99, 400.**

**Gross contribution of line increased by Rs.90, 000 per data**

**5. DATA ANALYSIS FOR DRILLING OPERATION**

For making the oil hole drilling operation for earlier Radial Drilling machines & oil hole drilling Jigs & fixture were used. For this operation 6 different tools are being used are listed below in Table 5.1.It is operation making of cylindrical hole in a work piece with the metal cutting tool known as drill. Various drilling operations Boring Counter boring, Reaming etc.

The cutting speed or surface speed (Vc) in for drilling is determined by periphery speed and can be calculated from the spindle speed (n) which is expressed in number of revolutions per minute.The main factors that characterize a hole from a machining point of view are diameter, depth, quality material, condition, reliability and productivity Drill selection depends up on the hole diameter, depth, quality requirements Type of drill, Grade and geometry and shank style.

**Table-5.1: List of tools used on radial drilling machine with operational view**

Tool size	Operation	View of operation.	Remarks
Dia.16 mm T. S. drill	Counter drilling		Section view of dia.16 mm counter.
Dia.7.5 mm HSS drill	7.5 mm *14 mm deep drilling		Section view of dia.16 mm & 7.5 mm counter.

**Table-5.2: Cycle time details of oil hole drilling operation.**

<b>D-2267 cycle time. (Before)</b>				
<b>Sr. No.</b>	<b>Operation</b>	<b>Rpm + Feed</b>	<b>ActivityTime Sec.)</b>	<b>Cumulative time</b>
1	Job Loading		15	15
2	Job Clamping		15	30
3	Tool Change		7	37
4	Probing		32	69
5	Tool Change		7	76
6	16 mm Counter	1600-50	59	135
7	Tool Change		7	142
8	7.5 mm Counter	2400-150	61	203
9	Tool Change		7	210
10	7 mm Pilot	2500-250	54	264
11	Tool Change		7	271
12	7 mm Long	2500-600	97	368
13	Tool Change		7	375
14	60° IOH Chamfer	900-400	39	414
15	Tool Change		7	421
16	8 mm Reaming	400-50	69	490
17	Tool Change		7	497
18	IOH De burring	2500-600	97	594
19	Job unclamping		14	608
20	Job unloading		20	628
Total Time For 1 Job production in seconds				628
Total Time For 1 Job production in minute's				10.47
<b>Total Qty.(85% P.I.) in a day.=(1109/10.5)</b>				<b>105</b>

Table 5.2 shows the previous cycle time of oil hole drilling operation on HMC machine is 10.47 min. floor to floor, which can produce 105 nos. per day at 85% P.I. Hence with this production rate it is difficult to meet the customer requirement 115 numbers a day.

**• Technical calculations for drilling for 7mm dia. drill**

For calculating cutting force, MRR and power required parameters are spindle revolution per minute, drill diameter, depth of cut, feed rate are being used.

**Area AT** =  $\text{PIE}/4 * \text{D}^2$

=  $(3.414/4) * (0.275 * 0.2757)$

= 0.59 inch sq.

**Metal removal rate (Q)** =  $\text{vf} * \text{AT}$

=  $250 * 0.59$

= 14.75 inch cub/min

**Nominal chip thickness (hD)**

hD = nominal chip thickness mm

fz = feed per edge mm/rev

k = cutting edge angle for drilling

$\text{hD} = \text{fz} * \sin k$

=  $0.1 * \sin (165)$

$$= 0.1 * 0.25$$

$$= 0.025 \text{ mm}$$

$$= 0.0635 \text{ inc.}$$

**Calculate cutting force**

Kc = stress in PSI (pounds per square inch)

Yo = effective rake angle (-5 degree)

mc = exponent

kc1.1= cutting force for 0.0635 inch chip thickness Lbf/inch<sup>2</sup>

$$Kc = (1-0.01*(Yo)/(hD/0.04)*mc)*kc1.1$$

$$= (1-0.01*(-5)/ ((0.0635).25 / 0.04)*25) *218000$$

$$= 1.50 *218000$$

$$= 328209.19 \text{ Lbs / inch }^2 \text{ (PSI)}$$

**Converting into N/mm<sup>2</sup>**

$$= 2263.04 \text{ N/mm}^2$$

**Calculating Power**

$$Pc = (Q/396000)*Kc$$

$$= (14.75/396000)*328209.19$$

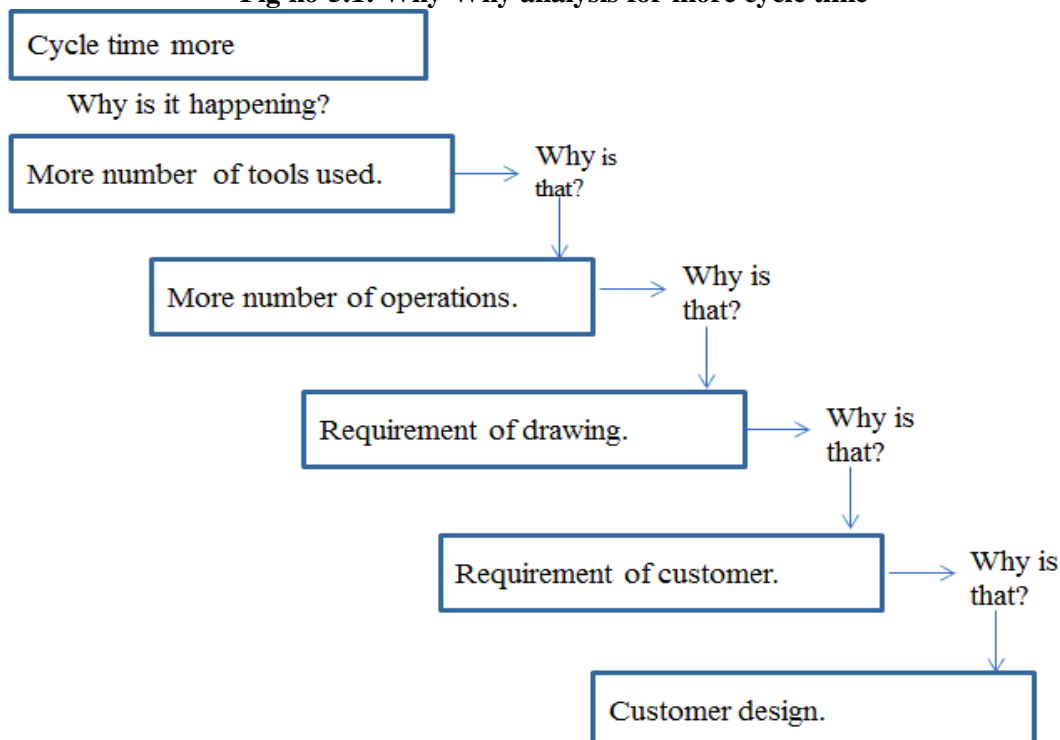
$$= 12.22 \text{ HP.}$$

**DATA ANALYSIS**

The possible causes for the more cycle time are the existing type of cutting tool used, cutting parameters used, CNC program, Spindle run-out, Fixture clamping, Clamping pressure, Tool holding problem, Low skilled operator, job clamping pressure etc.

To overcome this problem, causes from Cause and Effect diagram are not giving the desired output. Hence studied the existing operation in detail and also conducted why-why analysis to find out the reason for more cycle time.

**Fig no-5.1: Why-Why analysis for more cycle time**



After conducting Why-Why analysis it is observed that the numbers of tools required more and it is requirement of the operation. After brain storming and discussion the idea came of combining the operation by modifying the tool wherever possible. The combination tool helps in reducing cutting time, tool change time.

Possible combinations of operations found are 3 nos. as follows.

- 1) Combination of 7, 7.5 mm & 60 degree chamfer
- 2) Combination of 7.5 & 7mm diameter.
- 3) Combination of 60° chamfer & 7.5 mm diameter

**• Recommendation and Action**

All the above three combinations can help to reduce the cycle time by saving the tool change time and the cutting time of operation. However following points are considering for the selection of the best combination.

- 1) Cutting depth, 2) Cutting load, 3) Cutting parameters, 4) Special tool or Can be reuse, 5) Easy for Manufacturer, 6) Cost of tool, 7) Quality of end product

Based on the above points and as described below combination no 3 is found to be the most suitable.

- 1) It is observed that the three operation combination tool of Dia. Combination of 7, 7.5 mm & 60° chamfer can give the drastic saving in cycle time but at the same time it become a special tool & more costly.
- 2) The second combination of dia.7mm and dia.7.5mm tool can be reuse but during the re-sharpening of the tool difficult to control & maintain the specification for the manufacturer. During the operation it may affect the required quality.
- 3) The third combination of 7.5 and 60° chamfer which gives the better result than the other two in respect of cost, quality, no specialization in tool and easy to manufacture.

**• Regularization of the new tool into production (Process Control)**

After conducting the trial of this tool & comparing the result the new tool introduced in the operation sheet for regular production.

**• Result of new combination tool**

**A) Productivity results**

With the using of new combination tool of dia. 7.5 mm and 60 degree chamfer tool and optimizing the cutting parameters the cycle time came down **from 10.5 min to 8.5 min** floor to floor at 85% P.I. as shown in Table 5.3

**Table-5.3: New cycle time with using combination tool and optimizing the cutting parameters**

<b>D-2267 Cycle time. (After Using 7.5 &amp; chamfer combination drill &amp; Optimizing the cutting parameters.)</b>					
Sr.No.	Operation	Rpm + Feed	Activity Time (Sec.)	Cumulative time	Remarks.
1	Job Loading		20	20	
2	Job Clamping		10	30	
3	Tool Change		7	37	
4	Probing		32	69	
5	Tool Change		7	76	
6	16 mm Counter	1600-100	21	97	
7	Tool Change		7	106	
8	7.5 mm Step tool.	2000-250	52	158	
9	Tool Change		7	165	
10	7 mm Pilot	2500-400	55	220	
11	Tool Change		7	227	
12	7 mm Long	2500-600	100	327	
13	Tool Change		0	327	
14	60° IOH Chamfer	900-400	0	327	
15	Tool Change		7	334	



16	8 mm Reaming	400-50	70	404	
17	<b>Tool Change</b>		7	411	
18	IOH De -burring	2500-1000	71	482	
19	Job unclamping		14	496	
20	Job unloading		15	511	
Total Time For 1 Job production in seconds				511	
Total Time For 1 Job production in minutes				8.51	
<b>Total Qty.(85% P.I.) in a day.=(1109/8.50)</b>				<b>130</b>	

Cycle time reduced from 10.5min to 8.5 min. which can produce a maximum of 130 nos. per day at 85% P.I. Hence it has not only met the current requirement but also has scope for meeting further requirements. Figure number 5.2 indicates the graph of reduction in cycle time of oil hole drilling operation.

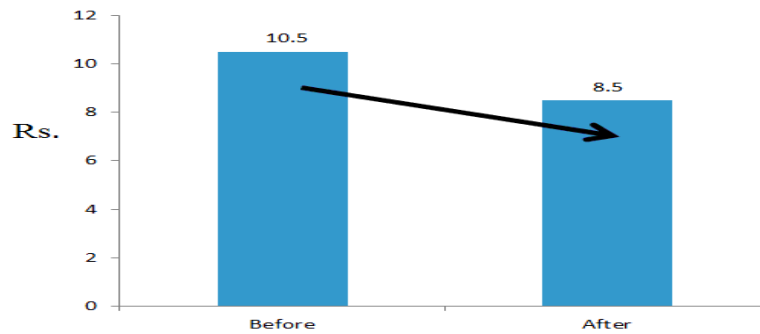


Fig no-5.2: Cycle time reduction graph

Line capacity increased from 105 nos. to 115 nos. per day, which is the current requirement. Business Contribution of one crankshaft to MCD is Rs.6466. Therefore **Rs.64660** gross contribution of line can increase per day.

**B) Tool life results**

Using 2500 RPM spindle speed and 250 mm per min feed rate it produced 435 nos. of crankshaft on new combination drill.

**C) Tool cost results**

The cost of old drill and chamfer tool v/s The Combination tool is given below.

Dia. 7.5 mm drill cost =Rs.1800.

60° chamfer head cost =Rs.2585

Chamfer head body cost =Rs. 2360

Total cost =1800+2585+2360 =Rs.6825.

Combination Tool (Dia.7.5 & 60 Degree) Cost =Rs. 3780.

Comparing above data it indicates that there is saving of Rs.3045, Which is 44.61% direct saving in tool cost. In a year, 10 nos. of drill used and the one time tool cost saved is **Rs.30,450**. Figure 5.3 shows tool cost saving for one tool.

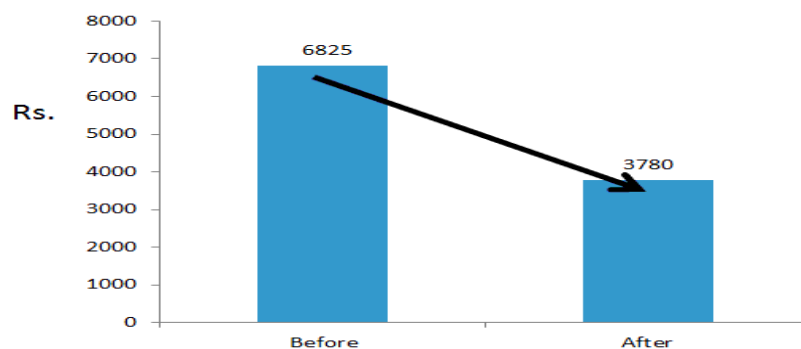


Fig no-5.3: Tool cost saving graph

The main objective of project is to increase the capacity of oil hole drilling operation to meet the 115 nos. per day achieved by using combination drill. Using combination drill of two step of dia. 7.5mm and 60 degree chamfer saved the cost by **44.61 % (i.e. Rs.30,450 per annum)** and also it helps to increase the productivity for this operation by **22.85%** (From 106 nos. per day to 130 nos. Per day). Therefore **Rs.64660** gross Business contribution of line can increase.

## **6. RECOMMENDATION**

To achieve 0.04 run out and 0.03 run out (R/O) on flange outer diameter (FOD) and Gear end (GE) diameter after grinding can be maintained by clubbing the operation of flange bore and second re-centering with flange end drilling and tapping on HMC.

### **Following are the actions recommended.**

- For initial setting mandrel used for finding out the co- ordinate for bore & chamfer
- For flange end bore dia. 28mm drill can be used.
- For flange chamfer tool can be used.
- For gear end drilling the second station of tall machine can be used.
- Instead of gear end re centering pneumatic center polish gun is to be used. Check the cycle time for the modified process.

## **7. CONCLUSION**

There is wide scope to apply the principles used in this project for the improvement in manufacturing process, cycle time reduction, cost reduction, productivity improvement and quality of product.

- For job no. 3425 finish bore operation to be combined with flange end drilling and tapping operation on HMC machine which helps to reduce manual and skilled work.
- Reducing tooling cost with the help of modifying the milling cutter and insert for bevel milling operation for job no 2267 on vertical machining center (VMC).
- Job no 3230 oil hole drilling cycle time reduction by reducing the non-cutting time, modifying the tool length (drill), optimizing the cutting parameters and accordingly modifying the program.

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**ROLE OF ARTIFICIAL INTELLIGENCE IN TRANSFORMING MODERN DAY BUSINESS**

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**ABSTRACT**

*The world is changing at an unprecedented speed, the businesses need to update how machines and humans function. And Artificial intelligence is helping satisfy those businesses to achieve their goals. The role of artificial intelligence in business is becoming more and more important and the number of organizations that have enabled the technology at their organization level is increasing. Indeed, implementing this powerful technology has numerous benefits, including making faster and more informed decisions, increasing operational efficiency, creating new innovative products and services, and achieving many more others. The paper present the role played by artificial intelligence in modern business organizations.*

*Keywords: Machine Learning, Business, manufacturing*

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**IDEATION OF ARTIFICIAL INTELLIGENCE**

The term Artificial Intelligence is invented by John McCarthy in 1956. He defines AI as “The science and engineering of making intelligent machines, especially intelligent computer programs”. The term "artificial intelligence" is also defined as systems that combine sophisticated hardware and software with elaborate databases and knowledge-based processing models to demonstrate characteristics of effective human decision making.

The seeds of modern AI were planted by classical philosophers who attempted to describe the process of human thinking as the mechanical manipulation of symbols. This work resulted in the invention of the programmable digital computer in the 1940s, a machine based on the abstract essence of mathematical reasoning. This device and the ideas behind it inspired a handful of scientists to begin seriously discussing the possibility of building an electronic brain.

The field of AI research was founded at a workshop held on the campus of Dartmouth College during the summer of 1956. Many of them predicted that a machine as intelligent as a human being would exist in no more than a generation and they were given millions of dollars to make this vision come true.

AI enables machines to think and act like human brains. It analyzes human behavior in the process of solving a problem and making a decision. Accordingly, AI embeds the ability to learn, work and decide in machines, software, and systems so that they can respond smartly in various situations. According to Forrester, Mental technologies such as robots, artificial intelligence (AI), machine learning, and automation may replace 7% of US jobs by 2025.

**SIGNIFICANCE OF ARTIFICIAL INTELLIGENCE IN MODERN TIMES**

Artificial intelligence was once a phenomenon restricted to sci-fi movies, but technology has caught up with imagination. Now AI has become reality and most people encounter some form of artificial intelligence in their everyday lives. Artificial Intelligence brings intelligent behavior to the robot, to be able to provide services to humans in unpredictable and changing environments, such as homes, hospitals, the work place, and all around us.

The concept of artificial intelligence is booming in today’s competitive arena. AI has been the focal point of attraction for many technology companies in recent years. It is estimated to be one of the fastest growing industries in the coming decade. Artificial intelligence is helping to shape businesses for the better, with the implementation of strategic advancements in technology. Artificial Intelligence is, in fact, our next great technological revolution. It's inherently changing the way information is gathered, stored, and used. And like any revolution, it antiquates the processes that came before it.

The reality today is that AI is taking over large parts of the business processes previously done manually. With each new addition to the AI toolbox, companies that don't utilize all of the advances available will fall behind in productivity and efficiency. This paradigm holds true across industries.

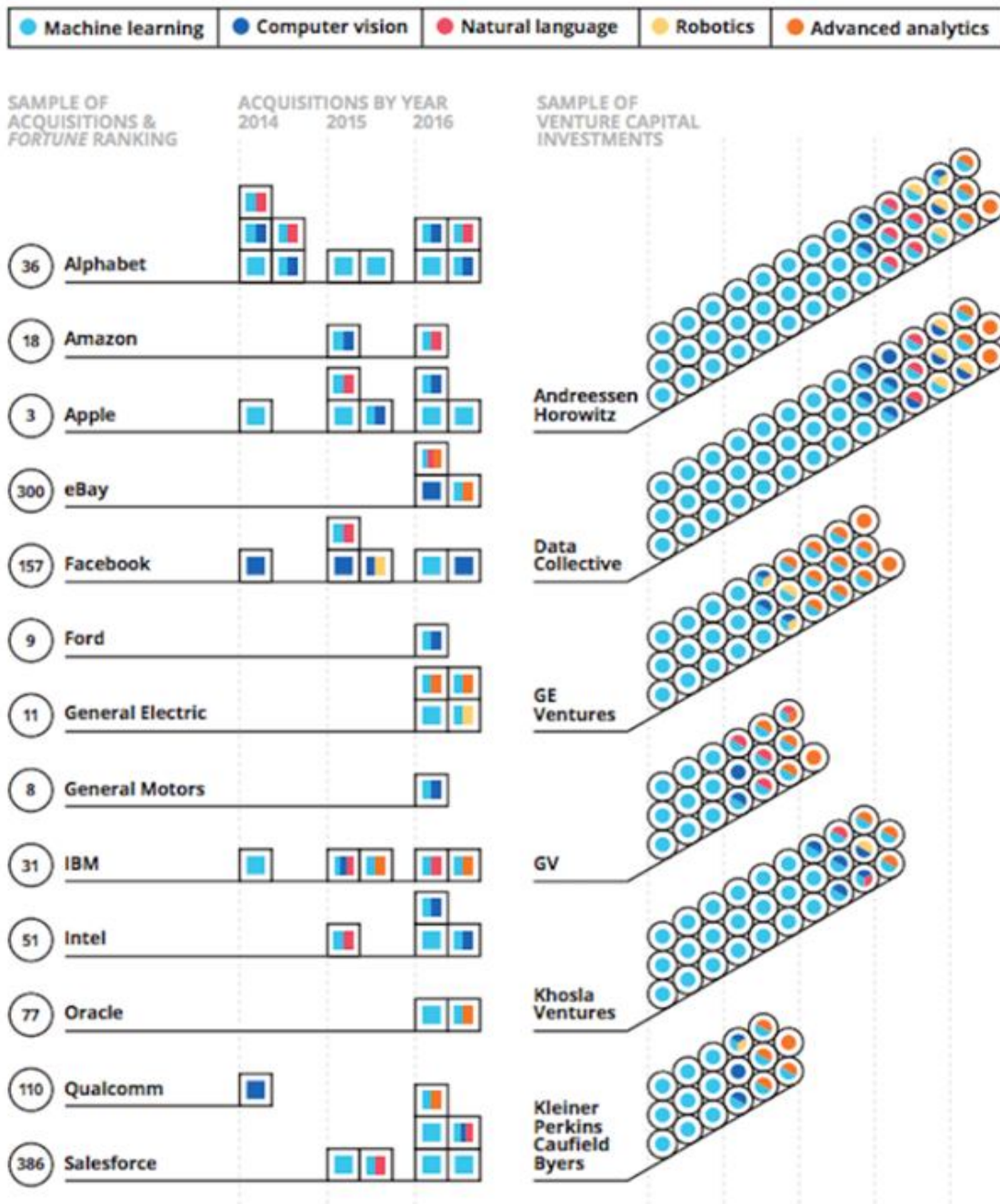
The desired business results that are expected from the application of AI are also diverse. The revenues from the AI market worldwide in 2017 were estimated at \$4.8 billion, but the future looks even better. In fact, Statista predicts the size of the market to reach \$89.8 billion in 2025.

Investing in AI has become a norm in the past few months, with large companies implementing AI into their platforms. Amazon and Facebook are among the many major enterprises that have structured artificial intelligence into their system. AI in business decision-making strategies has become a crucial part of technology companies.

AI has been used to help consumers make purchases or other decisions (like the Netflix algorithm that suggests things you might like based on prior viewing history) and through smart home devices like the Nest thermostat that can adjust based on whether you're home or not. AI has also been more viable for commercial applications, it has brought consumers many things already – personal assistants in the form of Amazon's Alexa, Google Home, and Apple's voice assistant Siri.

**Figure 1. Machine intelligence's impact: Sample acquisitions and investments, 2014–2016**

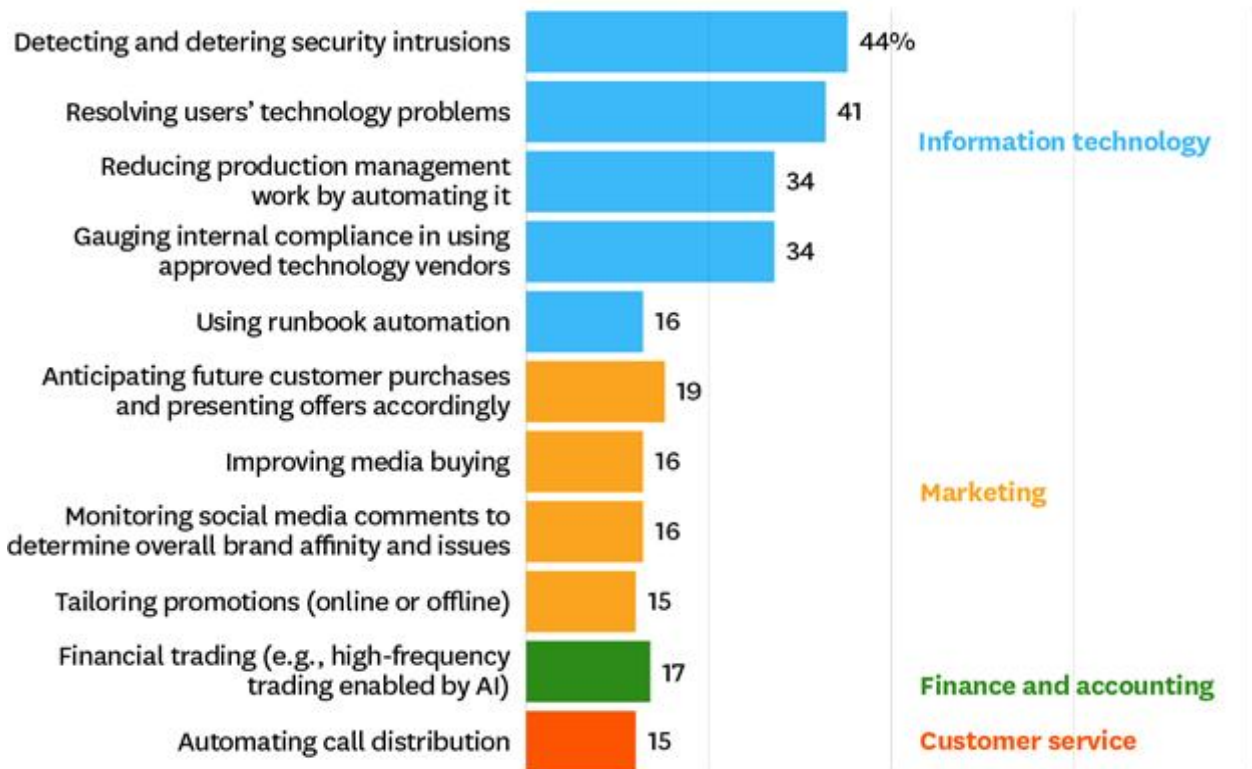
A Deloitte analysis reveals that *Fortune* 500 companies and venture capital firms have recognized the potential of machine intelligence and are strategically investing to build new capabilities.



Sources: Publicly available information on all Fortune 500 companies and on technology companies in the Fortune 500; Erin Griffith, "Here are the 51 technology and telecommunications companies of the Fortune 500," *Fortune*, June 7, 2016, <http://for.tn/22a9uUJO>; All investment information provided by cited companies, December 2016.

## How Companies Around the World Are Using Artificial Intelligence

IT activities are the most popular.



SOURCE TATA CONSULTANCY SERVICES SURVEY OF 835 COMPANIES, 2017

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### APPLICATIONS OF A.I. IN BUSINESS MANAGEMENT

Artificial intelligence is playing a role in business is behind the scenes. This means that AI can be rolled out to handle, manage, or assist with regular aspects and functions of the business.

Using artificial intelligence in business information can be a huge benefit. AI algorithms are already helping more businesses manage their data through deep analysis and plenty of specific industries are already benefitting from AI in their operations.

### AI IN MANUFACTURING SECTOR

AI finds use in a number of businesses including gaming, bank, retail, business, and authorities, and is slowly becoming pervasive in the production field, facilitating the automation of industries. AI-pushed machines are paving an easier course to the future by supplying a sponsor of benefits - offering fresh opportunities, improving production efficiencies, and getting machine discussion nearer to the individual discussion.

The automation of knowledge is driving the Next Industrial Revolution -based work; by making fresh ways to automate tasks, we could rebuild the way humans and devices socialize and reside, to generate an electronic economy that is better, more powerful.

AI assists beat several built-in problems which have been plaguing the sector: to integration problems, decision complexity, and information overload, from a shortage of expertise. Adopting AI on the shop ground enables companies to completely change their procedures. Permit seem at what AI is supporting the production sector to reach.

- **Method Automatic for Humans:** As the shop-floor is taken over by AI and performs individual jobs that are monotonous and typical, employees may reach focus on advanced and elaborate undertakings. While AI takes treatment of menial labor, people may concentrate on driving innovation and directing their company to newer levels.
- **Round-the-time Production:** The use of robots and AI is particularly appealing in commercial manufacturing as they revolutionize mass production. Robots are capable of delivering higher quantities of quality guarantee, optimizing the production model, raising capability, building automation solutions eliminating human error and do-ing jobs that are repetitive.

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**Operating Conditions:** With a few bad luck happening on the shop floor, a change towards AI indicates fewer folks have to carry too laborious and hazardous function out. As humans are replaced by robots and execute undertakings that are high-risk and mundane, the number of workplace casualties will plummet all across.

- Fresh Chances a non-stop, 24 \* 7 production line can be enabled by bots, While humans are compelled to work in 3 shifts to make certain steady creation Companies meet the growing demand of customers worldwide and can increase their creation capabilities.
- Decreased Working Expenditure: The ROI is appreciably greater although getting AI on the shop floor would need a substantial riches investment. As intelligent machines begin taking good care of day-to-day actions, businesses can enjoy overhead that is considerably lower.

**Logistics:** Companies that use freight trucks or flights have found that using AI processes helps to determine efficient travel patterns based on the AI ability to source information from several places including weather, average fuel consumption, traffic, and other elements.

**Healthcare:** Some healthcare organizations are using AI to supplement physician training and education. Plus, AI has already been used in the healthcare industry to help review medical records and evaluate treatment approaches, like a digital assistant for doctors.

**HR and staffing:** Human resource departments and staffing agencies are using AI technologies to help them find the best talent from resume submissions. AI can match the best applicants with the job positions based on keyword functionality and AI's ability to gather and analyze information from several sources co-currently.

#### **BANKING AND FINANCE – FRAUD DETECTION**

Many banks use the various applications of artificial intelligence to detect fraudulent activity. The AI software is given a very large sample of data that includes fraudulent and non-fraudulent purchases and is trained to determine whether a transaction is valid based on data. Over time, the software becomes incredibly adept at spotting fraudulent transactions based on what it has learned previously.

#### **RETAIL – ONLINE CUSTOMER SUPPORT**

Many websites now offer some form of 'chat' functionality where you can talk to a customer support representative or sales representative. In most instances, it is some form of automated AI that begins these conversations. As these AI chat bots are capable of understanding natural language, i.e. human conversation, they can readily assist customers in finding out what they need to know, extracting information from the website, and directing them to the appropriate web page or person for further support.

#### **SECURITY**

As cyber-attacks increase in frequency and more sophisticated tools are used to breach cyber defences, human operators are no longer enough. Top firms across the world are investing heavily in cybersecurity to ensure their data is protected. Real-time threat detection, mitigation, and ideally, prevention, are what's needed for businesses – and AI can deliver. Using machine learning algorithms and feeding those algorithms great quantities of data, IT and security experts can teach the AI solution to monitor behaviour, detect anomalies, adapt and respond to threats and issue alerts. AI has quickly become a key component in a business' cybersecurity infrastructure, providing a multi-layered security strategy that is robust and sophisticated.

#### **CRM**

Gone are the days when a human resource was the base of Customer Relationship Management (CRM). Huge efforts were made to gather and evaluate data so as to offer superb services to the clients. Now, AI can sift through vast volumes of data in order to predict exactly which clients will execute a buying decision, therefore, efforts are made to secure their engagement. CRM pinpoints buying trends so that your actions are directed in a right way. With advanced CRM solutions, predictions are made with enhanced accuracy, thus the sales team can concentrate on building long-lasting associations with customers.

Sales representatives are relieved from the monotonous task of analyzing numbers. They can now just focus on their revenue goals. So, now AI has become the fulcrum of sales efforts.

#### **AUTOMATION**

Artificial Intelligence and machine learning do not connote that robots are taking over, even though some feel have these impressions. AI is basically providing retailers with the opportunity to offer what exactly a customer desires, and that also regardless of any time constraint. By making use of AI, sales representatives can connect customers in a better way. It also helps to save them time and do away with frustration involved in explaining a thing repeatedly and rehashing the minute details.

**TRAVEL INDUSTRY**

It is very common that every time we book a flight, the nearest hotels and restaurants are recommended to us, ordered by price and location? That's an AI trying to help out. Much in the same way apps use AI, the travel and tourism industry thrives on AI and localization to make travel experiences better.

From camping to five star hotels, travel websites and supply stores will often use AI to help us plan our trip. In fact, there are downloadable travel AI concierges, called chatbots, that will directly help us plan our trip, whether it's in buying the best tent for a given price range, or in arranging the best suite to stay in at the Cosmopolitan.

AI has revolutionized the travel industry, scouring the internet to consistently give you the best and most educated decisions to make your travel experiences as painless as possible. In fact, AI can also impact services such as debt collection.

**SERVICE MANAGEMENT AND SOFTWARE DEVELOPMENT**

From customer support to software development, AI has its uses. To begin, AI is an effective way of troubleshooting basic problems, making it a useful customer support tool in IT service management. Serving in a more complicated niche, AI can also help software engineers develop new products. From running tests faster than an engineer ever could, to predictive reasoning-based problem solving, AI is rapidly becoming a primary tool in software development. AI is also extremely useful in analyzing data stored in cloud storage tools and using that data to create advantages for everyone from software engineers to business owners.

**CONCLUSION**

Businesses have profited from AI already, and it is no question that it will only become more important. According to Medium, "Artificial Intelligence has the potential to streamline business processes, improve customer services and leverage sensor-driven data for marketing and advertising. By 2019 the global content analytics, discovery and cognitive systems market will be worth \$9.2 billion." Organisations that respond rapidly to opportunities in artificial intelligence application will have the advantage in the landscape of the future. But, because AI is evolving rapidly, the challenge is to ensure that the business has the necessary strategies and plans to support AI capabilities as they become available, and the right technical infrastructure to support AI implementation. For many businesses, it's not a question of if but rather when to adopt AI. On that basis, monitoring the development of AI technology and planning far in advance is necessary to adopt AI successfully.

It is not a stretch to say that AI has found a use in every industry. Whether it be for simple tasks such as suggesting products or providing customers with basic customer service, or for complicated measures such as running software tests and completing extensive problem-solving procedures for industries such as debt collection, AI has found its place in our world, and it's safe to say that it's here to stay.

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**TO STUDY THE SEARCH ENGINE OPTIMIZATION STRATEGY FOR EFFECTIVE AND EFFICIENT RESULT: A LITERATURE REVIEW**

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**ABSTRACT**

*Search engine optimization (SEO for short) is a new concept of internet marketing in India. The biggest difference between SEO and Pay-Per-Click - keyword advertising - is that the results appear automatically in a search. To the consumers, it is seen as the answer to their search, not as advertising. As for this, the hit rate is much higher than PPC. The base concept of SEO is to design websites that are friendly and logical to the search engine, thus boosting your website's ranking. SEO is simply the process of obtaining website visitors (or traffic) from "free" or "organic" search results in search engines like Google, Bing or any search engine. All major search engines have primary search results that are ranked based on what the search engine considers most relevant to users. We call these organic results, because they are free and not driven by paid advertisements.*

*Search engine optimization helps maximize the number of visitors to a particular website or page by ensuring that the site appears high on the list of organic results returned by a given search engine. A crucial factor in polishing website's search engine optimization is making sure web pages are user-friendly for both potential customers and search engine robots. While search engines are becoming increasingly advanced, SEO enables their systems to better interpret what each page is about. Therefore, when properly executed, website will be easily discovered by the people in your target market.*

*Keywords: search engine optimization, Pay per click, website, target market, website visitor.*

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**INTRODUCTION**

Search engines are the foundation of the Internet. Most users will turn to a search engine as the quickest way of finding the information, or product that they want. Even well known brands still find that at least 30% of their visitors come via a search engine, rather than typing in the website address of the individual brand. The more obscure your product is, or the less well known your brand is, the more likely it is that you will need to rely on appearing in the search engine results to attract visitors to your site.

The problem is everyone, including your competitors, wants to be top of the list, especially given the number of products that are searched on every day. Search engines are the single largest source of web traffic. To market your business online you want internet users that don't know your site yet to be able to find you.

SEO is Search Engine Optimization. It is the process of getting traffic from the Organic or Inorganic ways. Whenever you enter a query in a search engine and hit 'enter' you get a list of web results that contain that query term. Users normally tend to visit websites that are at the top of this list as they perceive those to be more relevant to the query.

If you have ever wondered why any of these websites rank better than the others then you must know that it is because of a powerful web marketing technique called Search Engine Optimization (SEO). SEO is a Business marketing strategy and a process, widely used for improving the volume or quality of traffic to a website through search engines.

SEO is basically divided into Organic and Inorganic way. Organic Way is further divided into Black hat SEO and White hat SEO. Inorganic way is all about Google Ad-words and Google Ad-sense.

SEO is in its nascent stage and requires lot of research in interdisciplinary areas. It would probably have a lot to do with marketing and behavioral pattern, keyword influences studies. Data analysis will include the statistical records from Google Analytics and using other SEO tools.

The aim of this research study is to propose an effective and collective strategy namely "Vibgyor Strategy" using hybrid techniques based on interdisciplinary analysis to achieve effective results to Search Engine Optimization.

**NEED OF RESEARCH**

When a website is hosted, its aim is to attract hits. If it is unable to do so, the whole purpose is lost. When a new user tries to use any SEO techniques to improve website hits, he goes under trial and error experiments.

Unknowing many people violate Google web masters rules, it leads to fall back in page ranking as search algorithm drags them down.

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There are no formal guidelines on how to formulate a strategy for better SEO results. Search engines give brief vague guidelines, but they will never provide precise tips. Search engines normally protect their indexing methods search algorithms. If those are know, that can provide a great in-sight to obtaining better results with the SEO.

Better results with SEOs are not a shortcut to success, at least not for 99% of the companies out there. One won't win by fooling Google into listing his/her first for a common search term. One will win once he/she figure out the simple mechanics of turning strangers into friends and friends into customers.

The job of all SEO is to make search engines believe a site is important (whether or not it actually is). There is more than one way to skin a cat. No matter how one can do it the job of the SEO is to improve rankings. Certain sites will require certain techniques whereas other sites will require other techniques. Some categories are so competitive that they may require operating more than the SEO guidelines set by the major search engines.

Personal Education is the Only Way to Guarantee Quality SEO. One should do his/her own research and ask own questions when looking for an effective SEO strategy. No directory listing can guarantee quality services.

Researcher here aims to analyze majority of important algorithms and techniques, to use web analytic reading in best possible ways and finding out the best optimum strategy.

### **LITERATURE REVIEW**

- Search engine optimization (SEO) is the procedure of designing, writing, and coding a website in a way that helps to improve the volume, quality and visibility of company website by people using search engines via natural("organic" or "algorithmic") search results. To achieve higher ranking, SEO provides a variety of techniques, it include increasing links from other websites to company web pages, editing the content of the website, reorganizing the structure and organization of website, and coding changes as specific keyword placements. Currently, Google is the most widely used at 83%. Search engine optimization is wide spread in the world of online advertising, a 2010 survey of 1500 advertisers and agencies revealed that 90% of them engaged in SEO compared to 81% who purchased sponsored links. SEO gathers the techniques leading to a better indexing of one's site by one or several targeted search engines. It is also defined as the process of identifying factors in a webpage which would impact search engine accessibility to it and fine-tuning the many elements of a website so it can achieve the highest possible visibility when a search engine responds to a relevant query. (2005-2010)<sup>[2]</sup>
- According to Paraskevaset al., (2011) there are basically two types of search engines that collect information in different ways. The first one is Crawler-Based Search Engines (e.g. Google and AltaVista), while the second one is Human-Powered Directories (e.g. Yahoo Directory andBusiness.com). Search engines are complex software applications that are automated to survey ("crawl" or "spider") the Internet to find websites. A Search Engine crawler is also referred to as "robot" or "bot" and it's a program, which searches or browses the Web in a logical, automated manner. Search engines use crawlers to find up-to-date information. Crawlers are mainly used to create a copy of all the visited pages. <sup>[2][3]</sup>
- Study of a Web Crawler (2012) states that a Web crawler starts with a list of URLs to visit, called the seeds. As the crawler visits these URLs, it identifies all the hyperlinks in the page and adds them to the list of URLs to visit, called the crawl frontier. URLs from the frontier are recursively visited according to a set of policies. If the crawler is performing archiving of websites it copies and saves the information as it goes. The archives are usually stored in such a way they can be viewed, read and navigated as they were on the live web, but are preserved as 'snapshots'. The archive is known as the repository and is designed to store and manage the collection of web pages. The repository only stores HTML pages and these pages are stored as distinct files. A repository is similar to any other system that stores data, like a modern day database. The only difference is that a repository does not need all the functionality offered by a database system. The repository stores the most recent version of the web page retrieved by the crawler. <sup>[3]</sup>
- Study of algorithm (2010-2015) states that today Hummingbird algorithm is working. Previously Panda algorithm was working, then panda algorithm got replaced by penguin algorithm. Google's Panda Update is a filter introduced in February 2011 meant to stop sites with poor quality content from working their way into Google's top search results. Panda is updated from time-to-time. When this happens, sites previously hit may escape, if they've made the right changes. Panda may also catch sites that escaped before. A refresh also means "false positives" might get released. Google Penguin is a code name for a Google algorithm update that was first announced on April 24, 2012. The update is aimed at decreasing search engine rankings of websites that violate Google's Webmaster Guidelines by using now declared black-hat SEO techniques

involved in increasing artificially the ranking of a webpage by manipulating the number of links pointing to the page. Such tactics are commonly described as link schemes. According to Google's John Mueller, Google has announced all updates to the Penguin filter to the public. "Hummingbird" is the name of the new search algorithm that Google is using as of September 2013, the name comes from being "precise and fast" and is designed to better focus on the meaning behind the words. Hummingbird is paying more attention to each word in a query, ensuring that the whole query the whole sentence or conversation or meaning is taken into account, rather than particular words. The goal is that pages matching the meaning do better, rather than pages matching just a few words. The Hummingbird is an entirely new algorithm. It approaches search engine queries in a brand new and intelligent way utilizing new technology combined with older features of the existing algorithms. It is named for the speed and accuracy of the tiny bird. <sup>[6][7]</sup>

- Study of Robot.txt states that a robots.txt file provides information for search engine spiders that crawl the web. Before these bots access pages of a site, they check to see if a robots.txt file exists. Doing so makes crawling the web more efficient, because the robots.txt file keeps the bots from accessing certain pages that should not be indexed by the search engines. Having a robots.txt file is a best practice. Both robots.txt and robots meta tags rely on cooperation from the robots, and are by no means guaranteed to work for every bot. <sup>[8][9]</sup>

### Robots.txt syntax

User-agent: Googlebot

Disallow:

User-agent: msnbot

Disallow: /

# Block all robots from tmp and logs directories

User-agent: \*

Disallow: /tmp/

Disallow: /logs # for directories and files called logs

- Study of Site map states that Sitemaps are a way to tell Google about pages on your site we might not otherwise discover. In its simplest terms, a XML Sitemap—usually called Sitemap, with a capital S—is a list of the pages on your website. Creating and submitting a Sitemap helps make sure that Google knows about all the pages on your site, including URLs that may not be discoverable by Google's normal crawling process. Sitemaps are particularly helpful if:
  - Your site has dynamic content.
  - Your site has pages that aren't easily discovered by Googlebot during the crawl process—for example, pages featuring rich AJAX or images.
  - Your site is new and has few links to it. <sup>[7][10]</sup>
- Kaurin and Dragić, (2012) research aimed to determine the influence of Meta Tags usage on web rating within Search Engine Results Pages i.e. SERP by examining travel agencies in Serbia, as a relatively new but the large market, and their knowledge and right usage of available technologies of Meta Tags usage. Research covered a total of 66 travel agencies operating in Serbia. Companies are mostly from cities in the regional centers. The study used quantitative and qualitative research methodology. Research result shows that 41 of 66 companies (62%) are maintaining their own website, and that the rest (25 companies, 38%) do not have their internet presentation or are using other websites for their promotion.
- Singh et al., (2011) investigate the impact of Search Engine Optimization on Advertisement in IT companies of north India. The study use quantitative and qualitative research methodology. Google, Bing MSN, and Yahoo etc, are a common search engines that consumers use when they search for product or services online. The majority or about 90% of the customers select the product from first page only and out of that 90% more than 80% select the product or services from first three or four. The study concludes that companies using SEO for the purpose of advertisement are getting more new customer than the companies using traditional methods.
- Berman and Katonay, (2012) study the impact of search engine optimization (SEO) on the competition between advertisers for organic and sponsored search results. They find that a positive level of search engine optimization may improve the search engine's ranking quality and thus the satisfaction of its visitors. Results

imply that high quality sites have an advantage as they can always use sponsored links as a backup option if their organic link does not place well. In the absence of sponsored links, the organic ranking is improved by SEO if and only if the quality provided by a website is sufficiently positively correlated with its valuation for consumers. That is, if sites' valuations for consumers are correlated with their qualities then consumers are better off with some positive level of SEO than without. By contrast, if there are sites that extract high value from visitors yet provide them with low quality then SEO is generally detrimental to consumer welfare. As a result of the high expected quality on the organic side, consumers begin their search with an organic click. Although SEO can improve consumer welfare and the payoff of high quality sites, they find that the search engine's revenues are typically lower when advertisers spend more on SEO and thus less on sponsored links.

- Lourdes and Paloma, (2013) conducted an interesting research on the relationship between SEO onpage factors and web accessibility. Access to web content is the central link between SEO and accessibility. The research described arose from an investigation into the observed phenomenon that pages from accessible websites regularly appear near the top of search engine such as Google results, without any deliberate effort having been made through the application of search engine optimization i.e. SEO techniques to achieve this. The research provides firm evidence that the overlapping factors not only serve to ensure the accessibility of a website for all users, but are also useful for the optimization of the website's search engine ranking. The paper demonstrates that any SEO project undertaken should include, as a prerequisite, the proper design of accessible web content, inasmuch as search engines will interpret the web accessibility achieved as an indicator of quality and will be able to better access and index the resulting web content.
- Madlenak, et al., (2015) published article is to find the suitable Internet marketing tools that increase the number of visitors at the business website. For the Analysis of website traffic, Google Analytics was used. While Face book Insights tool and correlation analysis was used to find the degree of dependence between visitors streams at personal and official business website. Results of the research show a clear correlation between website traffic at business and personal websites as well as clear correlation between competition at social network and business websites traffic. The researchers suggested that the creation of primary website must be supported by additional activities as a social network activities, frequent actualization of website and creation secondary websites, that are connected with primary website.
- Hamza SalimKhrain, PhD(2015), published research paper on SEO-The Impact of Search Engine Optimization Dimensions on Companies Using Online Advertisement in Jordan. This research paper aims to explore the importance and benefits of SEO in marketing as well as to examine the impact of SEO dimensions on online advertisement. A questionnaire was distributed personally on 121 companies in Jordan. Out of 121, only 102 companies completed and returned the questionnaire, which give 72% response rate. Factor Analysis provided four dimensions which were used later in Multiple Regression. Those factors were named as; SEO connectivity, SEO competitiveness, SEO experience and SEO techniques. Results show that SEO connectivity was not significant, while the remaining three dimensions were all significant.
- Raymond Wayne(Jan 27, 2016) has published a book - Quickstart SEO.This book is written on competition analysis i.e. To help marketers to surpass their competitors, this book emphasizes on competition analysis technique and tweaks which works with Google search engine.
- Albert Mora(Mar 10, 2015) has published a book - On-site SEO Guide: A 100% Practical Step By Step SEO Tutorial For Dummies & Beginners. This book is written on OnPage SEO Practices steps. Each OnPage technique is explained step by step.
- Elena Filatova(Jun 19, 2010) has published a book - SEO: How To Make Search Engines To Love Your Site. This book is written on OffPage optimization techniques. It explains ways to promote web site using social signals.

#### **OBJECTIVES OF THE STUDY**

- To perform comparative study of Google search engine algorithms – panda algorithm, Penguin algorithm, Hummingbird algorithm and to achieve new insights into it.
- To analyze existing search engine techniques thoroughly using page rank tools, keyword density counter, web analytics and other SEO tools.
- To investigate modified search engine techniques and compare result reading with exiting search engine techniques.
- To discover best optimum search engine optimization strategy – Vibgour.

➤ To compare Vibgour strategy with existing strategies.

**METHODOLOGY - RESEARCH APPROACHES**

Experimental Research: Experimental research provides a systematic and logical method for answering the question, “What will happen if this is done when certain variables are carefully controlled or manipulated?” In fact, deliberate manipulation is a part of the experimental method.

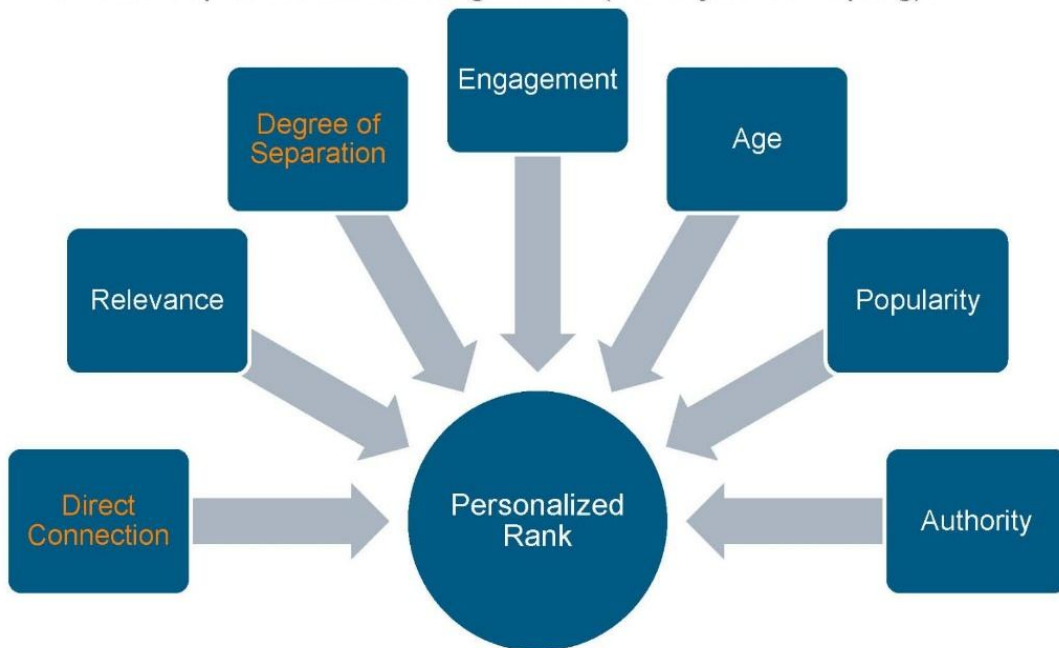
In an experiment, the researcher measures the effects of an experiment which he conducts intentionally.

**CONCLUSION**

➤ Page Rank improvement

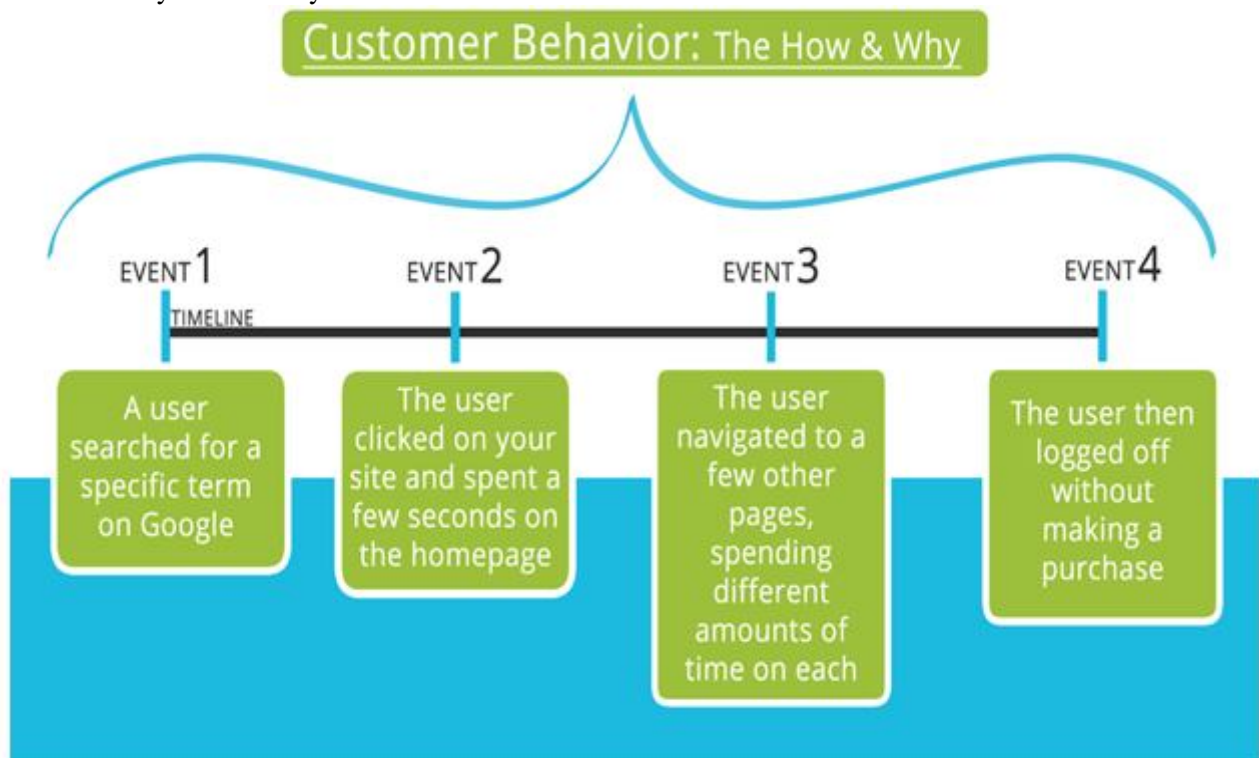
*Google Personalized Ranking Factors*

- G+ can help with these ranking factors (this is just a sampling).

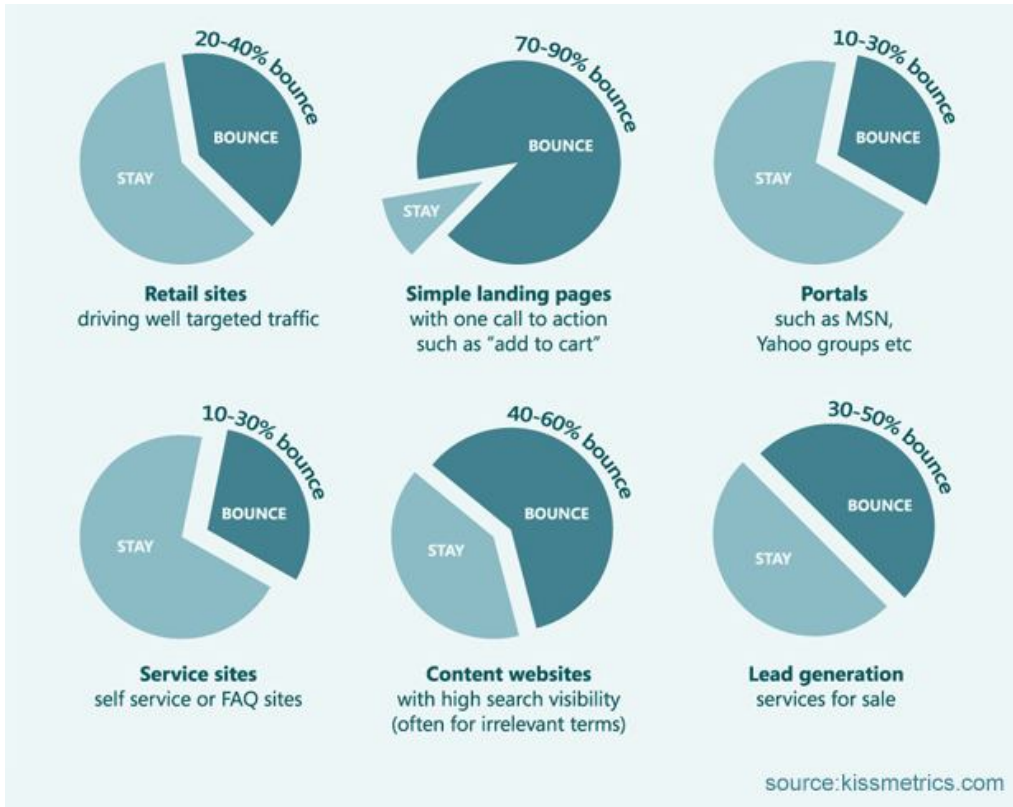


**Personalized Rank will begin to be more important than the existing PageRank metric.**

➤ Moderate Keyword density

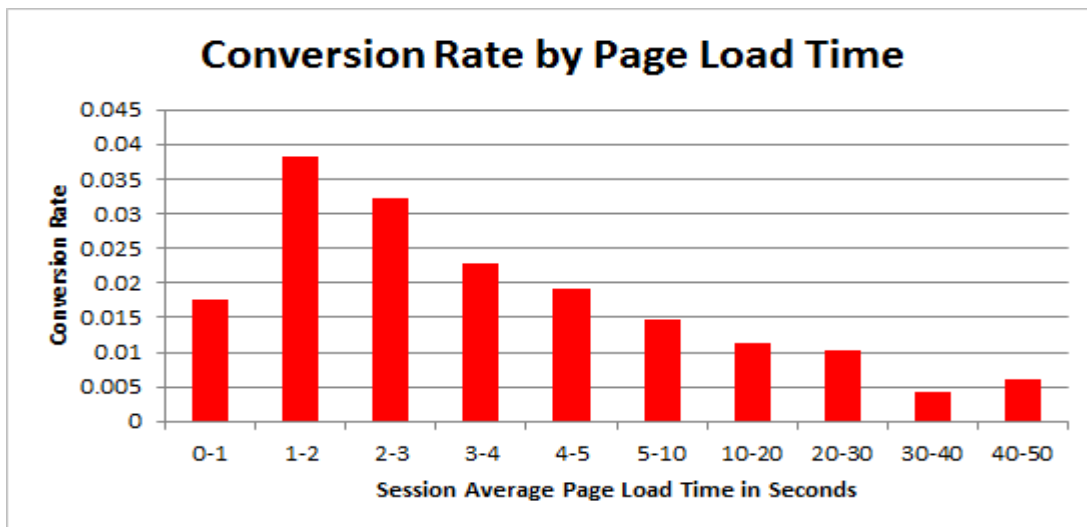


➤ Bounce rate is below 30%



➤ Improved Click through rate

➤ Incremented % of number of visitors (Traffic improvements)



➤ Hosted Web page appears on first Search Engine Result Page

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## RURAL EMPLOYMENT GENERATION AND AWARENESS OF BASIC SERVICES PROGRAMMES IN INDIA

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### ABSTRACT

*India's anti-poverty strategy comprises of a wide range of poverty alleviation and employment generation programmes, many of which have been in operation for several years and have been strengthened to generate more employment, create productive assets, impart technical and entrepreneurial skills and raise the income level of the poor. Under these schemes, both wage employment and self-employment are provided to the people. The Government proposed to unify the various poverty alleviation and employment generation programmes under two broad categories of Self Employment Schemes and Wage Employment Schemes. Funding and organizational patterns will also be rationalized to achieve maximum beneficial impact of these programmes.*

*Since Independence rural employment has been the prime agenda of debate in the country as 74% of the unemployed population hails from rural India. For the past three decades India has been implementing rural employment generating programmes. The Govt. of India, therefore, has always been making effort to restructure the lives of unskilled labour by creating infrastructure and establishing institutional setup for removal of the poverty in rural areas:-*

*To achieve this aforesaid objective, the Govt. has implemented many rural development schemes such as the Swarnjayanti Gram Swarozgar Yojana, Indira Awaas Yojana, Pradhan Mantri Gramodaya Yojana, Pradhan Mantri Gram Shadakh Yojana etc.*

*The paper enlightens reasons of poverty, choosing and estimating poverty indicators & employment generation programmes & the implementation of Mahatma Gandhi National Rural Employment Guarantee Act in India.*

*Keywords: Poverty, Rural employment, Development Schemes, MGNREGA, etc.*

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### INTRODUCTION

Poverty can be defined as a situation when people are unable to satisfy the basic needs of life. A major cause of poverty among rural people in India is lack of access for both individuals and communities to productive assets and financial resources. High levels of illiteracy, inadequate health care and extremely limited access to social services are common among poor rural people. Micro enterprise development, which could generate income and enable them to improve their living conditions, has only recently become a focus of the government.

“Poverty encompasses different dimensions of deprivation that relate to human capabilities including consumption and food security, health, education, rights, voice, security, dignity and decent work.”

### REASONS FOR POVERTY AND UNEMPLOYMENT

- Unequal distribution of income
- High population growth
- Illiteracy
- Large families
- Cast system
- Improper training
- Slow job growth
- **Unequal distribution of income**

The one of the important reasons of poverty is unequal distribution of income i.e. there is difference in pattern of salary and wage given to women workers and men and there is no importance given to under developed areas it is the indicator of unequal distribution of income.

- **High population growth:** - Increase in population will leads to poverty.
  - **Illiteracy:** - If the people having low income they cannot educate their children's, that's leads to poverty.
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- **Joint families:**-In India there is joint family system, in joint family one person is working and others are depending on his income, that's why it leads to shortage of food and money.

- **Caste system**

Additionally, the Indian family unit is often very large, which can amplify the effects of poverty. Also, the caste system still prevails in India, and this is also a major reason for rural poverty – people from the lower castes are often deprived of a number of facilities and opportunities. The government has planned and implemented poverty eradication programs, but the benefits of all these programs have yet to reach the core of the country.

- **Improper training:**- Lack of training in utilization of available resources will also leads to poverty.

Example: - If a person is from rich family background, he is having heavy financial resource with him but if he has lack of knowledge about how to utilize it will also leads to poverty.

- **Slow job growth:** - Because of increase in illiteracy and population there is no opportunities are there but capable persons are not available so there is no scope in growth of jobs it will also affect on poverty.

### **CHOOSING AND ESTIMATING POVERTY INDICATORS**

The poverty measure itself is a statistical function which translates the comparison of the indicator of well being and the poverty line which is made for each household into one aggregate number for the population as a whole or a population sub-group. Many alternative measures exist but the following three measures are most commonly used:

- **Incidence of poverty (headcount index)**

This is the share of the population whose income or consumption is below the poverty line, that is, the share of the population that cannot afford to buy a basic basket of goods. An analyst using several poverty lines, say one for poverty and one for extreme poverty, can estimate the incidence of both poverty and extreme poverty. For non monetary indicators, similarly, the incidence of poverty measures the share of the population which does not reach the defined threshold (e.g. percentage of the population with less than 3 years of education).

- **Depth of poverty (poverty gap)**

This provides information regarding how far off households are from the poverty line. This measure captures the mean aggregate income or consumption shortfall relative to the poverty line across the whole population. It is obtained by adding up all the shortfalls of the poor (considering the non-poor have having a shortfall of zero) and dividing the total by the population. Put differently, it gives the total resources needed to bring all the poor to the level of the poverty line (divided by the number of individuals in the population). This measure can also be used for non-monetary indicators, provided that the measure of the distance is meaningful. The poverty gap in education could be the 'number of years of education missing to reach the defined threshold'. In some cases, though, the measure does not make sense or is not quantifiable (e.g. when indicators are binary, such as literacy, in which case only the concept of the headcount can be used). Note also that, the poverty gap can be used as a measure of the 'minimum amount of resources necessary to eradicate poverty', that is, the amount that one would have to transfer to the poor under perfect targeting (i.e. each poor getting exactly the amount he/she needs to be lifted out of poverty) to bring them all out of poverty.

- **Poverty severity (squared poverty gap)**

This takes into account not only the distance separating the poor from the poverty line (the poverty gap), but also the inequality among the poor. That is, a higher weight is placed on those households who are further away from the poverty line. As for the poverty gap measure, limitations apply to some non-monetary indicators.

All of these measures can be calculated on a household basis, i.e. by assessing the share of households who are below the poverty line in the case of the headcount index. However, it might be better to estimate the measures on a population basis – in terms of individuals – in order to take into account the number of individuals within each household.

### **POVERTY ALLEVIATION, EMPLOYMENT GENERATION & BASIC PROGRAMS IN INDIA**

#### **(a) Pradhan Mantri Gram Sadak Yojana (PMGSY)**

Launched on December 25, 2000 as a 100 per cent Centrally Sponsored Scheme (CSS), the primary objective of PMGSY is to provide all-weather connectivity to all the eligible unconnected habitations in the rural areas. Up to December 2006, with cumulative expenditure of INR 18,281 crore about 1,07,569 km of road works has been completed.

**(b) Indira Awaas Yojana (IAY)**

IAY is a C S S funded on cost-sharing basis between the Centre and the States in the ratio of 75:25. In the case of UTs, the entire funds are provided by the Centre. The target groups for housing under IAY are households

below poverty line living in rural areas, particularly those belonging to SC/ST and freed bonded labourers. Up to December 2006, with cumulative expenditure of INR 29,246.27 crore, 153 lakh houses have been constructed/ upgraded.

**(c) Swarnjayanti Gram Swarozgar Yojana(SGSY)**

S G S Y, a holistic self-employment generation programme, was launched from April 1, 1999 by restructuring the earlier Integrated Rural Development Programme (IRDP) and allied programmes. The emphasis of SGSY is on a focused approach to poverty alleviation, capitalizing advantages of group lending and overcoming the problems associated with a multiplicity of programmes. SGSY is funded on the same sharing basis as IAY. Up to December 31, 2006, 24.38 lakh self-help groups (SHGs) have been formed and 73.25 lakh swarozgaries have been assisted with a total outlay of INR 16,443.66 crores.

**(d) Sampoorna Grameen Rozgar Yojana (SGRY)**

SGRY, launched on September 25, 2001 to provide additional wage employment in the rural areas, has a cash and food grains component. The cash-component of SGRY is funded on the same sharing basis as IAY and

S G S Y, while food grains are provided free of cost to the States and UTs. In 2005-06, 82.18 crore person days of employment were generated with the Centre releasing INR 5497.43 crore as cash component and about 37.30 lakh tones of food grains to the States/UTs. Besides, under the special component of the SGRY, with the States/UTs meeting the cash components, Centre released 15.64 lakh tones of food grains to the 11 calamity affected States. In 2006-07 up to October 31, 2006, the number of person-days of employment generated under SGRY was INR 18.41 crore while the Centre's contributions in terms of cash and food grains component up to December 31, 2006 were INR 2,762 crore and 16.67 lakh tones, respectively. Under the special component, about 4.44 lakh tones of food grains have been released to calamity-hit States in the current year up to December 2006.

**(e) DPAP, DDP and IWDP**

Drought Prone Areas Programme (DPAP) was launched in 1973-74 to tackle the special problems faced by areas constantly affected by severe drought conditions. While Desert Development Programame (DDP) was launched in 1977-78 to mitigate the adverse effects of desertification, the Integrated Wasteland Development Progrmame (IWDP) was being implemented since 1989-90 for the development of wastelands / degraded lands. The basis of implementation of all three programmes has been shifted from sectoral to watershed basis from April 1995. So far, in 2006-07 up to January 31, 2007, 3,076 new projects covering 15.38 lakh ha, 2,270 new projects covering 11.35 lakh ha and 463 new projects covering 21.08 lakh ha have been sanctioned under DPAP, DDP and IWDP, respectively.

**(f) Swarna Jayanti Shahari Rozgar Yojana (SJSRY)**

In December 1997, the Urban Self-Employment Programme (USEP) and the Urban Wage Employment Programme (UWEP), which are the two special components of the SJSRY, substituted for various programmes operated earlier for urban poverty alleviation. The SJSRY is funded on the same sharing basis as IAY and S G S Y. The number of urban poor assisted for setting up micro/group enterprises in 2005-06 was 0.98 lakh against a target of 0.80 lakh; while in the current year, against a target of 1.20 lakh, 0.53 lakh was achieved by

December 31, 2006. The number of urban poor imparted skill training in 2005-06 was 1.42 lakh against a target of 1 lakh. In the current year, against a target of 1.50 lakh, 0.72 lakh was achieved by December 31, 2006. Under UWEP, the man days of employment generated was 43.48 lakh in 2005-06 and 1.78 lakh in the current year till now. Coverage of beneficiaries under the community structure component was 337.4 lakh both in 200506 and the current year up to December 31, 2006.

**(g) Valmiki Ambedkar Awas Yojana(VAMBAY)**

VAMBAY, launched in December 2001, facilitates construction and up gradation of dwelling units for slum dwellers, and provides a healthy and enabling environment through community toilets under Nirmal Bharat Abhiyan, a component of the scheme. The Central Government provides a subsidy of 50 per cent, with the balance provided by the State Governments/Union Territories. Cumulatively, up to March 2006, INR 936.63 crore had been released as Central subsidy for the construction /upgradation of 4, 58,630 dwelling units and 65,331 toilets seats. For 2006-07, Central allocation of INR 75 crore has been made for meeting the committed liabilities for on-going projects. VAMBAY has been subsumed in Integrated Housing and Slum Development

Programme (IHSDP) launched along with Jawaharlal Nehru National Urban Renewal Mission (JNNRUM) on December 3, 2005.

**(h) Jawaharlal Nehru National Urban Renewal Mission (JNNURM) JNNURM**

Which is for a seven-year period from 2005-06, has two main components – Basic Services to the Urban Poor (BSUP) Programme and Integrated Housing and Slum Development Programme (IHSDP). BSUP was launched to assist cities and towns in taking up housing and infrastructural facilities for the urban poor in 63 selected cities in the country. IHSDP for taking up housing and slum upgradation programmes in non-BSUP cities was launched along with BSUP in December 2005. The allocation for JNNURM in 2006-07 (BE) is INR 4,900 crore.

**(i) National Rural Employment Guarantee ACT (NREGA)**

With the NREG Act being passed in September, 2005, the NREGS was implemented from February 2, 2006 in 200 identified districts of the country with the objective of providing 100-days of guaranteed unskilled wage employment to each rural household opting for it. The ongoing programmes of SGRY and National Food for Work Programme (NFFWP) have been subsumed under NREGS in these districts. NREGS will cover all districts of the country within five years. The NREGS, a demand-driven scheme, has its focus on works relating to water conservation, drought proofing (including afforestation/tree plantation), land development, flood-control/protection (including drainage in waterlogged areas) and rural connectivity in terms of all-weather roads. Of the INR 11,300 crore allocated for NREGS in 2006-07(BE), INR 6,714.98 crore was released up to January 31, 2007. Till January 31, 3.47 crore job cards have been issued; and of the 1.50 crore households who have demanded employment, 1.47 crore households have been provided employment. Under the scheme, up to December 2006, of the 53.65 crore person-days of employment generated, 21.13 crore were for women; and of about 5.81 lakh works taken up, 2.34 lakh were completed.

**CONCLUSION**

Most of the poverty alleviation programmes have designed the objectives to help the currently poverty line. Important reasons into poverty are a large expenditure on sickness and beyond capacity expenses, rural connectivity, drought proofing, irrigation facilities and other social ceremonies. Being closer to rural people are expected to prove quite effective in popularization of such schemes. It is to be noted that the government should also receive due attention in rural development and poverty alleviation programmes. . The people of the area are backward and poor which will be a new hope for the livelihood of the rural people in the near future.

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**MANAGING ORGANIZATION AND HUMAN RESOURCES BY MBO (MANAGEMENT BY OBJECTIVES)-EXPLORATORY STUDY**

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**ABSTRACT**

*In today's scenario of globalization and modern civilization, people have inclination towards fulfillment of the objectives. They don't want to work for longer hours just sitting without having any objectives set by the organization. Employees want to work for fewer hours with technology aided environment which help them for enhancing their productivity. Companies are required to change working hour's policy as new generation employees prefer to work according to productivity and not according to the number of hours they spent. Organization can solve this contemporary issue of changing workforce by using technique of Management by Objectives. In this authors focus on current conditions of workforce change, need and importance of MBO & suggest possible steps to be taken up by HR department. Also authors going to light upon on some MNC's which practices MBO concepts.*

*Keywords: Management By Objective, performance appraisal, performance management, new generation performance management system.*

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**1. INTRODUCTION**

In today's scenario of globalization and modern civilization, people have inclination towards fulfillment of the objectives. They don't want to work for longer hours just sitting without having any objectives set by the organization. Employees want to work for fewer hours with technology aided environment which help them for enhancing their productivity. Employees want to spare their remaining time in their personal interest. Employees are interested in objective based performance management and performance appraisal rather than number of labor hours put in the work. Due to availability of part time jobs, online work people prefer to work which gives more flexibility and require putting fewer hours to fulfill their objectives. Organization can solve this contemporary issue of changing workforce by using technique of Management By objectives

**2. THEORITICAL BACKGROUND OF MBO****WHAT IS MBO?**

MBO is a modern way of setting objectives. **Management by objectives (MBO)**, also known as **management by results (MBR)**, was first popularized by Peter Drucker in his 1954 book *'The Practice of Management'*.

Management by objectives is the process of defining specific objectives within an organization that management can convey to organization members, then deciding on how to achieve each objective in sequence. This process allows managers to take work that needs to be done one step at a time to allow for a calm, yet productive work environment

**Management by objectives** at its core is the process of employers/supervisors attempting to manage their subordinates by introducing a set of specific goals that both the employee and the company strive to achieve in the near future, and working to meet those goals accordingly.

**Five steps**

1. Review organizational goal
2. Set worker objective
3. Monitor progress
4. Evaluation
5. Give reward

**3. RESEARCH OBJECTIVES**

1. To review the current conditions of workforce change.
2. To find the need and importance of MBO(Management By Objectives) for current new generation and business environment.
3. To suggest possible steps to be taken for HR policy formulation according to MBO

#### 4. RESEARCH METHODOLOGY

As the nature of the present study is largely exploratory, data were collected from secondary sources.

#### 5. DATA ANALYSIS

##### 5.1 Need of Mbo to Manage Organisations

###### 5.1.1 Emerging Y-Generation

Millennial (also known as Generation Y) who are born between 1980's to 2000. Given that India will become the youngest country by 2021, with 64% of its population in the working age group of 20-35 (Economic Survey, 2013-14). Trend towards smaller families in developing countries continued. Today's young Indians are more confident, assertive, entitled and more miserable than ever before. Indian domestic companies need to shape their strategies to remain relevant to this section, called millennial or Generation Y.

###### 5.1.2 Characteristics of Y-Generation

This Y-Generation are different than the X-Generation employees they want more freedom; they have lot of opportunities to work in diversified areas. They want technology to be used at workplace more getting more productivity they don't want to work for long boring 9-5 work time. For them working in one company is like one chapter. They will keep changing their jobs for better prosperity in their life. They have opportunities to work and settle in abroad, they have opportunities to work online where they have access to number of jobs interested to them and have chance to earn a lot compared to 9 to 5 boring job and also with a flexibility in time. This new generation employee wants to spare their time for their own interest for which they were dreaming since childhood to achieve. They don't want to stick to one profession throughout the life. They always want to change their career path after some couple of years.

###### 5.1.3 Foreign Countries are Attracting Indians

According to VFS global data visa applications by Indians increase by 13 % in 2018. The significant increase in Visa applications is seen for countries like Czech Republic, Estonia, Japan and Turkey along with regular destinations like Canada, Malaysia, US, UK, Australia. This shows that Y-generation are having more opportunities to migrate to other countries because they are not seeing working conditions as per their demand and finding better opportunities abroad.

###### 5.1.4 Application in Practices

There are endless ways to exercise management by objectives. One must simply find specific goals to aim for in an organization or business. Many noteworthy companies have used MBO. The management at the computer company **Hewlett-Packard (HP)**, has said that it considers the policy a huge component of its success. Many other corporations praise the effectiveness of MBO, including **Xerox, Intel, Microsoft** and countless others. Companies that use MBO often report greater sales rates, more return on investment and productiveness within the organization. Objectives can be set in all areas of activities such as production, marketing/sales, services, research and development, human resources management, Purchase, finance, logistics & supply chain and information systems. Some objectives are collective and some can be goals for each individual employee. Both make the task at hand seem attainable and enable the workers to visualize what needs to be done and how.

#### CURRENT PRACTICES

##### Google

MBO (Management by objectives) and MBR (Management by results) is used by Google in their goal setting process. Google introduced goal setting to its staff of 40 in the year 1999 and shared its views and value of setting objectives and key results in Google. Google gives its success ability credit to MBO

##### Hewlett-Packard

**At HP MBO is remained the philosophy of decentralization.** HP when saw number of employees growing worldwide. They realized MBO is only a way to manage such scattered employees which are located to different locations. So they decided to give employees objectives and freedom to achieve it in their ways in their responsibility areas. In 1995 David Packard wrote in his book "The HP Way: How Bill Hewlett and I Built Our Company." No operating policy has contributed more to Hewlett-Packard's success than the policy of **management by objectives.** MBO had been a fundamental part of HP's operating philosophy since the very early days of the company, which was founded in a Silicon Valley garage in 1939.

#### 6. HOW COMPANIES CAN ACHIEVE MBO?

##### 6.1 MBO and Flexiworking as a Need To Manage the New Generation Employee

Companies are required to change working hour's policy as new generation employees prefer to work according to the productivity concept and not according to the number of hours they spent. They don't want to be a part of boredom work which kills their daily all working time; they want to do something new to achieve their personal

objectives. Companies should decide working hour's policy by considering the objectives to be fulfilled within a span of time. Companies should plan their activities so that it can be completed in 5 days working because new generation employees prefer five days working. They don't want to do boredom work for 6 days, also they don't want to do the work for more than 8 hours. As they want to be responsible part towards the family and their personal objectives.

### **6.1.2 Use of Technology For Productivity**

Now a day's labor hours are not the measure of productivity but technology which is used is a measure of productivity. Because of Robotics, Automation in work, Internet, various software's like ERP, Data analytics it is possible to increase productivity with reduced no. of working hours. Company should use latest technology where it may be expensive but per hour production/services will be more so that companies will be comfortable to achieve their targets with less manpower as well as with less per unit cost. When productivity is more companies are able to work on MBO easily.

### **6.1.3 Setting Up Of Mbo's**

1. Company should first decide their corporate objectives (short term midterm and long term)
2. Company then should convert it into tactical objectives for middle level management
3. Middle level management should convert their tactical objectives into operations level objectives.
4. Objectives should be achievable by considering technology & resources.
5. Companies should keep performance appraisal by considering extent of fulfillments of the objectives given to team or members.
6. Objectives decided must be able to measure in measurable output
7. Objectives given to at various level of management should be achievable and not should be beyond their limit.
8. Every member or team must be given clear cut objectives to be achieved in desired time interval prescribed by the company.

### **6.1.4 Setting Up of Appraisal System and Performance Management System**

Organization should set their appraisal and performance management system by considering the MBO. Results of individual and group should be appraised with the Management by objectives and should be rewarded accordingly. That will boost the morale of the individual employees and groups to strive fulfill the objectives by time.

## **7. BENEFITS TO COMPANY**

- They impose disciplined thinking so major goals will surface.
- They let everyone in the organization know what's important and enable more accurate communication because everyone can see everyone else's priorities.
- They help establish indicators for measuring progress.
- They help focus effort and ensure alignment.

Management by objectives will give lot of benefits to companies as they get the work done in specified time by the employees with specified productivity. It helps companies to increase efficiency and product/service delivery on time. All the targets and results to be delivered are clear in the mind of company and employees so both strive to get the objectives. MBO keep high morale amongst the employees.

## **8 BENEFITS TO EMPLOYEE**

Employees are adhered with the objectives given by the company and they take self responsibility and self authority over the work which they have to perform. Management by objectives create high free rein system where boss has to do minimum decision making as employees take full responsibility and are highly motivated.

## **9. FINDINGS**

1. It is found that new generation employee prefer to work as per the objectives
2. It is found that new generation employee is more interested to work in those companies which have management by objectives.
3. It is found that companies like HP and Google gives credit to MBO in their success ability of the organization and for satisfied and motivated employees.

4. It is found that if freedom is given to employees to achieve their objectives in their responsibility areas they take liability and push themselves to achieve the objectives.
5. It is found that MBO way of managing organization and HR creates self discipline and self regulated culture.
6. A key part of the MBO process is that these objectives had to be clearly communicated and linked to each other, and across departments.
7. Companies that use MBO often report greater sales rates and productiveness within the organization

**10. CONCLUSION**

Companies that use MBO often generate greater sales rates and productiveness within the organization and get more return on investment. Companies like HP and Google gives their credit for long-term successability to MBO method. New generation employees likes flexi-work and stick to achieving objectives given by the companies rather than to work in rigid timings of 9-5. Organisations who want to grow and attract good employees should adopt the MBO way of working so their workplace culture will suitable to new generation employees. By using MBO companies can achieve its target and can sustain for long term.

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**CONSUMER BEHAVIOUR**

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**WHAT IS CONSUMER BEHAVIOUR?**

Consumer Behaviour is a branch which deals with the various stages a consumer goes through before purchasing products or services for his end use.

It is the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society.

Before understanding consumer behaviour let us first go through few more terminologies:

**WHO IS A CONSUMER?**

An individual who purchases products and services from the market for his/her own personal consumption is called as consumer.

In short, any individual who purchases & consumes goods and services available in the market is called a consumer.

**WHAT IS CONSUMER INTEREST?**

Customer inclination towards particular products and services and willingness of consumers to purchase products and services as per their taste, need and of course pocket is termed as Consumer Interest.

**WHY DO YOU THINK AN INDIVIDUAL BUYS A PRODUCT?**

- Need
- Social Status
- Gifting Purpose

**WHY DO YOU THINK AN INDIVIDUAL DOES NOT BUY A PRODUCT?**

- No requirement
- Income/Budget/Financial constraints
- Taste

**WHEN DO YOU THINK CONSUMERS PURCHASE PRODUCTS?**

- Festive season
- Birthday
- Anniversary
- Marriage or other special occasions

There are in fact several factors which influence buying decision of a consumer ranging from psychological, social, economic and so on.

The study of consumer behaviour explains as to

- Why and why not a consumer buys a product?
- When a consumer buys a product?
- How a consumer buys a product?

In a layman's language consumer behaviour deals with the buying behaviour of individuals.

The main catalyst which triggers the buying decision of an individual is need for a particular product/service. **Consumers purchase products and services as and when need arises.**

According to Belch and Belch, whenever need arises; a consumer searches for several information which would help him in his purchase.

Following are the sources of information:

- Personal Sources
- Commercial Sources
- Public Sources
- Personal Experience

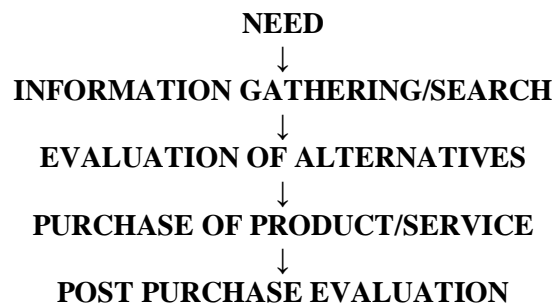
Perception also plays an important role in influencing the buying decision of consumers.

Buying decisions of consumers also depend on the following factors:

- Messages, advertisements, promotional materials, a consumer goes through also called **selective exposure**.
- Not all promotional materials and advertisements excite a consumer. A consumer does not pay attention to everything he sees. He is interested in only what he wants to see. Such behaviour is called **selective attention**.
- **Consumer interpretation** refers to how an individual perceives a particular message.
- A consumer would certainly buy something which appeals him the most. He would remember the most relevant and meaningful message also called as **selective retention**. He would obviously not remember something which has nothing to do with his need.

#### STAGES IN CONSUMER DECISION MAKING PROCESS

A consumer goes through several stages before purchasing a product or service.



1. **Step 1** - Need is the most important factor which leads to buying of products and services. Need infact is the catalyst which triggers the buying decision of individuals.

An individual who buys cold drink or a bottle of mineral water identifies his/her need as thirst. However in such cases steps such as information search and evaluation of alternatives are generally missing. These two steps are important when an individual purchases expensive products/services such as laptop, cars, mobile phones and so on.

2. **Step 2** - When an individual recognizes his need for a particular product/service he tries to gather as much information as he can.

An individual can acquire information through any of the following sources:

- **Personal Sources** - He might discuss his need with his friends, family members, co workers and other acquaintances.
  - **Commercial sources** - Advertisements, sales people (in Tim's case it was the store manager), Packaging of a particular product in many cases prompt individuals to buy the same, Displays (Props, Mannequins etc)
  - **Public sources** - Newspaper, Radio, Magazine
  - **Experiential sources** - Individual's own experience, prior handling of a particular product (Tim would definitely purchase a Dell laptop again if he had already used one)
3. **Step 3** - The next step is to evaluate the various alternatives available in the market. An individual after gathering relevant information tries to choose the best option available as per his need, taste and pocket.
  4. **Step 4** - After going through all the above stages, customer finally purchases the product.

**5. Step 5** - The purchase of the product is followed by post purchase evaluation. Post purchase evaluation refers to a customer's analysis whether the product was useful to him or not, whether the product fulfilled his need or not?

### **CULTURAL FACTORS AFFECTING CONSUMER BEHAVIOUR**

Consumer behaviour deals with the study of buying behaviour of consumers. Consumer behaviour helps us understand why and why not an individual purchases goods and services from the market.

There are several factors which influence the buying decision of consumers, cultural factors being one of the most important factors.

#### **What are Cultural Factors?**

**Cultural factors comprise of set of values and ideologies of a particular community or group of individuals.** It is the culture of an individual which decides the way he/she behaves. In simpler words, culture is nothing but values of an individual. What an individual learns from his parents and relatives as a child becomes his culture.

Example - In India, people still value joint family system and family ties. Children in India are conditioned to stay with their parents till they get married as compared to foreign countries where children are more independent and leave their parents once they start earning a living for themselves.

Cultural factors have a significant effect on an individual's buying decision. Every individual has different sets of habits, beliefs and principles which he/she develops from his family status and background. What they see from their childhood becomes their culture.

#### **Let us understand the influence of cultural factors on buying decision of individuals with the help of various examples.**

Females staying in West Bengal or Assam would prefer buying sarees as compared to Westerns. Similarly a male consumer would prefer a Dhoti Kurta during auspicious ceremonies in Eastern India as this is what their culture is. Girls in South India wear skirts and blouses as compared to girls in north India who are more into Salwar Kameez.

Our culture says that we need to wear traditional attire on marriages and this is what we have been following since years.

People in South India prefer rice over chapatti which is a favorite with people in North India.

#### **Subcultures**

Each culture further comprises of various subcultures such as religion, age, geographical location, gender (male/female), status etc.

#### **Religion (Christianity, Hindu, Muslim, Sikhism, Jainism etc)**

A Hindu bride wears red, maroon or a bright colour lehanga or saree whereas a Christian bride wears a white gown on her wedding day. It is against Hindu culture to wear white on auspicious occasions. Muslims on the other hand prefer to wear green on important occasions.

For Hindus eating beef is considered to be a sin whereas Muslims and Christians absolutely relish the same. Eating pork is against Muslim religion while Hindus do not mind eating it.

A sixty year old individual would not like something which is too bright and colorful. He would prefer something which is more sophisticated and simple. On the other hand a teenager would prefer funky dresses and loud colours.

#### **Status (Upper Class, Middle class and Lower Class)**

People from upper class generally have a tendency to spend on luxurious items such as expensive gadgets, cars, dresses etc. You would hardly find an individual from a lower class spending money on high-end products. A person who finds it difficult to make ends meet would rather prefer spending on items necessary for survival. Individuals from middle class segment generally are more interested in buying products which would make their future secure.

#### **Gender (Male/Female)**

People generally make fun of males buying fairness creams as in our culture only females are expected to buy and use beauty products. Males are perceived to be strong and tough who look good just the way they are.

**SOCIAL FACTORS AFFECTING CONSUMER BEHAVIOUR**

Consumer Behaviour is an effort to study and understand the buying tendencies of consumers for their end use.

**Social factors play an essential role in influencing the buying decisions of consumers.**

Human beings are social animals. We need people around to talk to and discuss various issues to reach to better solutions and ideas. We all live in a society and it is really important for individuals to adhere to the laws and regulations of society.

Social Factors influencing consumer buying decision can be classified as under:

- Reference Groups
- Immediate Family Members
- Relatives
- Role in the Society
- Status in the society
- **Reference Groups**

**Every individual has some people around who influence him/her in any way. Reference groups comprise of people that individuals compare themselves with.** Every individual knows some people in the society who become their idols in due course of time.

Co workers, family members, relatives, neighbours, friends, seniors at workplace often form reference groups.

Reference groups are generally of two types:

- **Primary Group** - consists of individuals one interacts with on a regular basis.

Primary groups include:

- Friends
- Family Members
- Relatives
- Co Workers

All the above influence the buying decisions of consumers due to following reasons:

They have used the product or brand earlier.

They know what the product is all about. They have complete knowledge about the features and specifications of the product.

Every individual goes through the following stages and shows a different buying need in each stage:

- **Bachelorhood:** Purchases Alcohol, Beer, Bike, Mobile Handsets (Spends Lavishly)
- **Newly Married:** Tend to purchase a new house, car, household furnishings. (Spends sensibly)
- **Family with Children:** Purchases products to secure his as well as his family's future.
- **Empty nest (Children getting married)/Retirement/Old Age:** Medicines, Health Products, and Necessary Items.
- **Secondary Groups** - Secondary groups share indirect relationship with the consumer. These groups are more formal and individuals do not interact with them on a regular basis, Example - Religious Associations, Political Parties, Clubs etc.

- **Role in the Society**

**Each individual plays a dual role in the society depending on the group he belongs to.** An individual working as Chief Executive Officer with a reputed firm is also someone's husband and father at home. The buying tendency of individuals depends on the role he plays in the society.

- **Social Status**

An individual from an upper middle class would spend on luxurious items whereas an individual from middle to lower income group would buy items required for his/her survival.

**PERSONAL FACTORS AFFECTING CONSUMER BEHAVIOUR**

Consumer Behaviour helps us understand the buying tendencies and spending patterns of consumers.

Not all individuals would prefer to buy similar products.

Consumer behaviour deals with as to why and why not an individual purchases particular products and services.

Personal Factors play an important role in affecting consumer buying behaviour.

**1. Occupation**

**The occupation of an individual plays a significant role in influencing his/her buying decision.**

An individual's nature of job has a direct influence on the products and brands he picks for himself/herself

An individual's designation and his nature of work influence his buying decisions. A senior professional can never afford to wear cheap labels and local brands to work where in you would never find a low level worker purchasing business suits, ties for himself. An individual working on the shop floor can't afford to wear premium brands everyday to work.

College goers and students would prefer casuals as compared to professionals who would be more interested in buying formal shirts and trousers.

**2. Age**

**Age and human lifecycle also influence the buying behaviour of consumers.** Teenagers would be more interested in buying bright and loud colours as compared to a middle aged or elderly individual who would prefer decent and subtle designs.

A bachelor would prefer spending lavishly on items like beer, bikes, music, clothes, parties, clubs and so on. A young single would hardly be interested in buying a house, property, insurance policies, gold etc. An individual who has a family, on the other hand would be more interested in buying something which would benefit his family and make their future secure.

**3. Economic Condition**

**The buying tendency of an individual is directly proportional to his income/earnings per month.** How much an individual brings home decides how much he spends and on which products?

Individuals with high income would buy expensive and premium products as compared to individuals from middle and lower income group who would spend mostly on necessary items. You would hardly find an individual from a low income group spending money on designer clothes and watches. He would be more interested in buying grocery items or products necessary for his survival.

**4. Lifestyle**

Lifestyle, a term proposed by Austrian psychologist Alfred Adler in 1929, refers to the way an individual stays in the society. It is really important for some people to wear branded clothes whereas some individuals are really not brand conscious. An individual staying in a posh locality needs to maintain his status and image. An individual's lifestyle is something to do with his style, attitude, perception, his social relations and immediate surroundings.

**5. Personality**

An individual's personality also affects his buying behaviour. Every individual has his/her own characteristic personality traits which reflect in his/her buying behaviour. A fitness freak would always look for fitness equipments whereas a music lover would happily spend on musical instruments, CDs, concerts, musical shows etc.

**PSYCHOLOGICAL FACTORS AFFECTING CONSUMER BEHAVIOUR**

Consumer Behaviour deals with the study of buying behaviour of consumers.

Let us understand the **effect of psychological factors on consumer behaviour:**

**Motivation**

There are several other factors which motivate individuals to purchase products and services.

An individual who is thirsty would definitely not mind spending on soft drinks, packaged water, juice and so on. Recognition and self esteem also influence the buying decision of individuals.

**Why do people wear branded clothes?**

Individuals prefer to spend on premium brands and unique merchandise for others to look up to them. Certain products become their status symbol and people know them by their choice of picking up products that are exclusive. An individual who wears a Tag Heuer watch would never purchase a local watch as this would be against his image.

**Perception****What is Perception?**

What an individual thinks about a particular product or service is his/her perception towards the same. For someone a Dell Laptop might be the best laptop while for others it could be just one of the best brands available.

Individuals with the same needs might not purchase similar products due to difference in perception as individuals think differently and their perceptions do not match.

Individuals perceive similar situation differently due to difference in the way they interpret information.

**There are three different processes which lead to difference in perception:**

1. **Selective Attention** - Selective attention refers to the process where individuals pay attention to information that is of use to them or their immediate family members. An individual in a single day is exposed to numerous advertisements, billboards, hoardings etc but he is interested in only those which would benefit him in any way. He would not be interested in information which is not relevant at the moment.
2. **Selective Distortion** - Consumers tend to perceive information in a way which would be in line to their existing thoughts and beliefs.
3. **Selective Retention** - Consumers remember information which would be useful to them, rest all they forget in due course of time. Michael wanted to purchase a watch for his wife and thus he remembered the RADO advertisement which he had seen several days ago.

**Learning**

Learning comes only through experience. An individual comes to know about a product and service only after he/she uses the same. An individual who is satisfied with a particular product/service will show a strong inclination towards buying the same product again.

**Beliefs and Attitude**

Beliefs and attitude play an essential role in influencing the buying decision of consumers. Individuals create a certain image of every product or service available in the market. Every brand has an image attached to it, also called its brand image.

Consumers purchase products/services based on their opinions which they form towards a particular product or service. A product might be really good but if the consumer feels it is useless, he would never buy it.

**ROLE OF CONSUMER BEHAVIOUR IN MARKETING**

Consumer Behaviour refers to the study of buying tendencies of consumers. An individual who goes for shopping does not necessarily end up buying products. There are several stages a consumer goes through before he finally picks up things available in the market. Various factors, be it cultural, social, personal or psychological influence the buying decision of individuals.

Marketers need to understand the buying behaviour of consumers for their products to do well. **It is really important for marketers to understand what prompts a consumer to purchase a particular product and what stops him from buying.**

What marketers need to understand ?

The psychology of consumers (what they feel about a particular product and their brand on the whole).

How consumers are influenced by their immediate surroundings, family members, friends, co workers and so on.

**What a consumer thinks when he goes out for shopping?**

A marketer needs to first identify his target consumers and understand their lifestyles, psychologies, income, spending capabilities, mentalities to offer them the right product.

Individuals from lower income group would never be interested in buying expensive and luxurious products. He would first fulfill his basic physiological needs like food, air, water etc.

It is really essential for the marketers to understand the needs of consumers and find out what they are actually looking for.

There are ideally two different ways which enable marketers to understand their consumers.

- Primary Research
- Secondary Research

**Primary Research** - Primary Research refers to a research methodology where marketers interact with consumers directly and gather as much information as they can. Information is generally collected through surveys, questionnaires, feedback forms, interviews etc.

**Secondary Research** - Secondary Research often refers to relying on information which has been collected by others at some point of time. The background and family status of an individual also influence his/her buying behaviour.

#### **Marketers must also take into account**

- Age group of consumers
- Geographical location
- Lifestyle of consumers
- Social Status of consumers

According to Lars Perner, Ph.D. of the Marshall School of Business at USC, "the study of consumers helps firms and organizations improve their marketing strategies by understanding issues" and continues to describe how "the psychology of how consumers think, feel, reason and select between different alternatives" and he cites brands and products as examples.

Other consumer behavioral factors of value are gaining perception of how consumers are influenced by their environments, shopping routines, decision making processes, and motivations.

Professor Perner also suggests there are four main benefits related to consumer behavior:

- 1) **Marketing Strategies** - this includes grasping good timing, effective advertising techniques and pleasing customers.
- 2) **Public Policy** - Gaining knowledge of public policy and how products can impact is critical.
- 3) **Social Marketing** - This factor involves ensuring ideas are passed to consumers rather than aggressive sales. This could include awareness or if society is resistant, alternative methods.
- 4) **Better Consumers** - Studying consumer behaviors make marketers better consumers too.

Researching consumer behavior is a complex process, but understanding consumer behavior is critical to marketers. Understanding how to utilize the information gleaned from consumer behavior is the key. Armed with this information marketers can focus on producing products and/or services targeted markets are actually interested in, and they can also figure out how to develop effective campaigns. They can use it to:

- Provide value and customer satisfaction.
- Effectively target customers.
- Enhance the value of the company.
- Improve products and services.
- Create a competitive advantage
- Understand how customers view their products versus their competitors' products.
- Expand the knowledge base in the field of marketing,
- Apply marketing strategies toward a positive affect on society (encourage people to support charities, promote healthy habits, reduce drug use etc.)

If these objectives can be accomplished, then the chance of converting marketing efforts to sales increases. Seems if a good glimpse in consumer behavior can be made, then the rest comes more naturally.

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**A STUDY OF CUSTOMER AWARENESS TOWARDS INTERNET BANKING**

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**ABSTRACT**

*Internet banking, both as a medium of delivery of banking services and as a strategic tools for business development, has gained wide acceptance internationally and is fast catching up in India with more banks entering the battle. The internet banking is altering the banking business and this is mainly affecting the banking relationships. Internet banking engages internet for delivery of banking products and services. The total internet users in the country are estimated at 9 lakh recently. However, this is expected to grow exponentially to 90 lakh by 2003. Merely 1% of Internet users used banking services online in 1998. The facility of accessing their accounts from anywhere in the world by using a home computer with internet connection, is particularly to non-residents Indians.*

*Customer awareness is about making the customer aware of his/her rights. It is a marketing term which means that customer are aware of product or services, its characteristics and the other marketing. Limited information, limited supplies and low literacy are factors causing exploitations of customers. The study is carried out to understand the customer Perception about the internet Banking service and to Know The Reason for Not Using Internet Banking Service. Customer awareness is a very important element as we move forward a close out sales. However, an organized and systematic movement to safeguard the interest of customers is a recent phenomenon. The customers have to be aware not only of the commercial aspects of sale and purchase of goods and services but also of the health and security aspects.*

*Keywords: Customer awareness, Internet banking, customer Perception*

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**I. INTRODUCTION**

Internet banking is the phrase used for new generation banking system. Internet banking is also called online banking and it is outgrowth of PC banking. It uses the internet as the delivery channel by which to conduct banking activity, for example transferring funds, paying bills, purchasing financial instruments and etc. Internet banking allows you to conduct bank transaction online, instead of finding a bank and interacting with a teller. In a broad sense, it is the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. "Internet Banking refers to system that enable banks customer to access accounts and general information on bank products and services through a personal computer or other intelligence device."

Internet banking is a system of banking that enables customer to perform various financial transactions on a secure website via the internet. There are numerous banks and credit union that have functional websites for internet banking. Internet banking offer large number of benefits for people involved in financial transaction. There is no need to visit your bank every time you need to transfer money. You can also do internet banking from the comfort of your house. Net banking facilitates transfer of money, payment of bills, checking of bank statements, checking of account balance, request for cheque book and various other financial transactions.

Online banking has made the life easy for people who are too busy to go to bank for conducting their financial transactions. Net banking offers the flexibility to do financial transactions on any day irrespective of the time. Now-a-days, people are too much stressed out because of their work pressure and net banking saves their time and energy, as they can pay bills, book their tickets, do online shopping, etc. by relaxing in their home.

Banks have designed their websites in a very user-friendly manner for net banking facilities. Most of the banking interfaces are easily viewable and instructions are provided at every step so that people can carry out any transactions almost effortlessly. In case people can get stuck in any transactions due to internet failure or any other reasons, he/she can take assistance from phone banking facility offered by banks. The phone banking features allows the customer to call the banks toll-free number and get required assistance in finishing their transactions.

**II. OBJECTIVES OF THE STUDY**

1. To Know the customer Perception about the internet Banking service
  2. To Know The Reason for Not Using Internet Banking Service In Bank Of Maharashtra.
  3. To Analyze customer Satisfaction level in the Internet Banking Facility
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### III. RESEARCH METHODOLOGY

The primary data refers to data which is observed or collected directly from first-hand experience, and thus happens to be original in character. Primary data was collected directly from customers through structured questionnaire. The population includes male and female customers residing in the area of Somwar Peth with the criteria: Customer with Bank of Maharashtra. In this Project convenience sampling method was followed. The sample size was 60 customer of Bank of Maharashtra Self-administrated personal survey method was used to collect the necessary data. For his purposes appropriate question were designed.

The secondary data, on the other hand, refers to published data or data collected in the past or from other parties. Secondary data has collected directly from the magazines, journals and various websites.

### IV. DATA ANALYSIS

**Table No-1: Distribution of Respondents According To Their Gender**

Gender	No.of respondents	Percentage
Male	31	52%
Female	29	48%
Total	60	100%

**Interpretation:** From the above table, 52% of the respondents are male and 48% of the respondents are female.

**Table No-2: Distribution of Respondents According to Their Age**

Age Class	No.of Respondents	Percentage
Below 20	11	16%
20-40	29	48%
40-60	20	28%
Above 60	0	8%
Total	60	100%

**Interpretation:** From the above table, 48% of the respondents are 20-40 years old, 28% of the respondents are of 40-60 years old , 16% of the respondents are below the age of 20 years and 8% are above 60 years of age which are mostly the pension account holders.

**Table No-3: Distributions of Respondents According To Their Occupations**

Occupations	No.of Respondents	Percentage
Housewife	3	5%
Students	6	10%
Salaried Person	21	35%
Business Man	16	27%
Others	14	23%
Total	60	100%

**Interpretations:** From the above table shows that, 35% of the respondents are salaried person, 27% of the respondents are businessman, 10% of the respondents are students and 5% of the respondents are housewife.

**Table No-4: Distributions of the Respondents According To Their Account Held with the Bank**

Status	No.of Respondents	Percentage
below 1year	6	10
1-3 year	18	30
3-5 year	19	32
above 5 years	17	28
Total	60	100

**Interpretations:** From the above table, 32% of the respondents have their account with the bank from 3-5 years, 30% of the respondents from 1-3 years, 28% of the respondents above 5 years.

**Table No-5: Distributions of Respondents According to their Usage of Internet Banking Services**

Status	No.of. Respondents	Percentage
Yes	43	71.60%
No	17	28.30%
Total	60	100%

**Interpretations:** From the above table, 71.60% of the respondents are using internet banking services offered by the bank and the remaining 28.30% of respondents are not using it.

**Table No-6: Distribution of Respondents According to the Transactions they made through Internet Banking Services**

Status	No.of.Respondents	Percentage
Balance Enquiry	10	23.20%
Mini statement	8	18.60%
Cheque Based enquiry	7	16.20%
Fund transfer	6	14%
Tax payment	6	14%
Others	6	14%
Total	43	100%

**Interpretations:** From the above table 14% of the respondents used through Internet Banking Services for Fund Transfer & Tax Payment. 18.26% of the respondents for mini statement, 16.2% of the respondents have made cheque based enquiry using internet banking service and the remaining 23.2% of the respondents used Internet Banking for Balance Enquiry.

**Table No-7: Distributions of Respondents as per reason for Not Using Internet Banking Services:**

Status	No.of.Respondents	Percentage
Confusing	6	35%
Lack of information	3	18%
Fear of Security	4	23.50%
Others	4	23.50%
Total	17	100%

**Interpretations:** From the Above table, 35% of the respondents did not use this services due to confusions in the internet banking service, 23.5% of the respondents did not use this services due to fear of security, 18% of the respondents did not use this services due to lack of information about the service and 23.5% of the respondents did not use this services due to some other reasons.

**Table No-8: Distributions of Respondents According To Their Satisfactions Towards Internet Banking Services**

Status	No.of.Respondents	Percentage
Cheap and best	10	23.20
Saves time	12	28
Fast transactions	13	30.20
No need to visit bank	8	18.60
Total	43	100

**Interpretations:** From the above table, 30.20% of the respondents are satisfied because of faster transactions, 28% of the respondents are satisfied because it saves time , 23.20% of the respondents are satisfied because it is cheap and best and remaining 18.60% of the respondents are satisfied because no need visit bank often.

**Table No-9: Distributions of the Respondents as per their Opinion towards facilities Offered by the Bank with respect to Internet Banking**

Status	No.of.Respondents	Percentage
Excellent	5	11.60%
Very Good	10	23.20%
Good	15	35%
Average	10	23.20%

Poor	3	7%
Total	43	100%

**Interpretations:** From the above table and chart, 35% of the respondents have rated good, 23.20% of the respondents have rated Very Good and Average, 11.60% of the respondents have rated Excellent and the remaining 7% of the respondents have rated poor for the facilities offered by the bank for internet banking services.

### FINDINGS

Form the data analysis of the survey done it is observed that 71.60% of the respondents are using internet banking services offered by the bank and the remaining 28.30% of respondents are not using it.

It was found that reasons for not using internet banking services were confusions among the customers about the use of services, fear of security and lack of information.

The customers using the internet banking services stated that they are satisfied with the services as it heplnt in faster transaction, saves time, its cheap and best and most importantly they dont have to visit banks often.

Maximum repondents have rated the internet banking services as Excellent,Very Good.

The repondents are aware and using different internet banking services for different purposes like Fund Transfer & Tax Payment, mini statement, cheque based enquiry ,and Balance Enquiry.

### RECOMMENDATIONS

- Though the internet banking is an effective tool but many of the customers are not using it as they are unaware of the particular direct banking channel. Now the responsibility lies with the bank to make them aware about various internet banking channels through publicity and advertisement.
- Bank should educate the customers about the usage of internet banking channel and also about their advantages. This would prompt the customers to shift from traditional to modern channel.
- It has been observed that even the customers who know about internet banking channel are not using this facility due to misconception and lack of information. These customers should be targeted by the bank and must be convinced to use the same.

### CONCLUSION

The success of the bank directly or indirectly depends upon on customer as they are the back bone of the banking. With the development of technology, the customer expectations is raising, only those will survive in the competition, who can respond to the customer needs faster and better than anyone. The customer is aware of bank of Maharashtra and various types of services provided by the bank. The result of the study show that usefulness , easy to use ,customer awareness and risk are the important determinant of internet banking adoption. The study conclude that majority of customer are accepting internet banking because of many favourable factor. Analysis concludes that customer should be made more aware about the usefulness of internet banking.The result of the study shows the customers are using only few facilities of various internets banking channel. Through e-banking provides a full gamut of various services. Customers should be made aware of these services and must be encouraged to use the same. The bank may improve existing facilities in rural areas through advertising spread awareness about computer and net banking. The best way to motivate the customers to use the e-banking is by the way of most efficient customers careservices.

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**A STUDY ON CONSUMERS' PREFERENCE TO SHOP AT SMALL RETAIL STORES AND ANTECEDENTS TO LOCAL STORE LOYALTY**

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**ABSTRACT**

*Small retail stores are major contributors of retail globally and it would be of academic as well as business interest to understand factors in the context of Traditional retailing. In particular, the Indian retail is dominated by the traditional grocery stores known as "Kiranans" and the knowledge of the difference in buyers' perception based on various factors would lead to a better understanding by these stores so as to devise their strategies to enhance the customer patronage. In this regard, the present study tries to study the buyers' perception of important retail attributes in Indian traditional retailing from the perspective of different variables like Understanding customer needs and problems, Price differentiation of the buyers, Immediacy of the store and Shopping Environment and Product Bundling Offers. The Interpretive Structural Model (ISM) has been developed after the Nominal Group Technique (NGT) by brainstorming session to determine the complex relationship among the different selected factors. These factors help to discuss service competition and the challenges retail sector faces in order to stay competitive.*

*Keywords: Retail Sector, NGT, ISM.*

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**I. INTRODUCTION**

Retailing in India is witnessing an exciting phase with the introduction of newer formats by organized retailers and their entry in the tier 3 cities of the country. A transition period is being witnessed as the organized retail players are attempting to gain market share from the traditional formats while the traditional stores are trying to adopt some practices of modern organized retailers. Retailing has now emerged as a fiercely competitive industry where wafer thin margins, floating buyers and intensive promotion has come to be accepted as necessary evils. So to remain in the business the retailers are required to continuously devise effective strategies to successfully survive and grow. In its entire attempt to woo retail customers it is significant for retailers to know that why shoppers pick one retailer while avoid the other stores and what are the important variables/factors that may influence store choice decisions.

Grocery is one category which is regularly procured and customers of different demographics are involved in it. So it is thought that by identifying the important perception difference among different demographic customers of store attributes, these vulnerable traditional grocery stores would be able to plan out their strategies in more effective manner to target the specific demographic groups and would be able to face the challenges posed by the organized players.

The research question considered here was: How various retail store attributes of traditional retail stores are rated/ perceived by customers of different Education/ Occupation characteristics? Is there a significant difference in different Education/ Occupation group customers' perception of Traditional Grocery stores?

**Traditional Grocery Stores:** Grocery stores are defined for the study purpose are those stores which sell the daily need items mainly food and other household requirements. Grocery shopping refers to hopping for food and grocery products. Food and grocery shopping includes shopping for grains, pulses, fresh fruits and vegetables, packaged food, personal products and some household goods ( Sinha, Mathew and Kansal, 2005) . The traditional formats include low-cost retailing such as the local traditional grocery stores (kirana), mom and pop stores, paan vendors, convenience stores. Customers enjoy loyalty schemes offered by retailers. Based on the importance of retail stores the objectives of the paper are: 1) to determine the critical factors affecting retail sectors and 2) to develop a structure of interrelationship among the critical success factors using ISM.

**II. LITERATURE REVIEW**

Martinie (1958) highlighted, way back, the importance of buyers' perception of store attributes in store choice behaviour and suggested that both the "Functional attributes" (location and layout of the store, price ranges etc.) and "Psychological attributes" (refers to such qualities as friendliness of store personnel, sense of belonging, or attractiveness of décor) are strong influence in store choice. Brown (1969) also supported this by asserting that "Buying decisions are based on the comparative attractiveness of alternative offerings. Purchasers evaluate these alternatives on several dimensions, forming opinions that may or may not coincide with reality. An individual shopper differs in her shopping behavior patterns, attitudes toward shopping, and demographic

characteristics from others. All of these factors influence the perceptual process (Brown 1969). Hills et al. (1973) also insisted that the way consumers perceive a retail store and its marketing policies (such as price, assortment, and quality) affects both shopping and expenditure patterns and the buyers' level of satisfaction with the retailing system.

Oxenfeldt (1974) also clarified that the customer reacts to the store's characteristics, as he views them, in an emotional way. That is, some customers may feel toward one store as a warm, trustworthy, helpful friend. Other stores may seem to these same people deceitful, exploitative, unpleasant, and antagonistic. He also stressed that one finds that almost all customers have impressions-and fairly strong ones-about the characteristics of many individual stores, including some with whom they have not even dealt. Doyle and Fenwick (1974) stressed as well that the consumer's evaluation of all salient aspects of the store as individually perceived and weighted is the cause of what draws shoppers to one store rather than another

Sr. No	Study	Critical success factor	References
1	Issues in Retailing	Convenient timing	Arshad, S.A. and Hisam, M.W. (2008)
2	A study on the challenges and opportunities faced by organized retail players in Bangalore	Credit Availability	Dash, M and Chandy, S. (2009)
3	Brand Position of General Store From Consumer's Perspective- A comparative Study on Departmental Store and Traditional Shop	Immediacy of the store	Gupta, M. (2004)
4	Impact of Organized Retailing on Unorganized Sector", A study in Jammu Region.	Proper packaging of products	Gupta, Urvashi (2012)
5	Customer expectations of store attributes: A study of organized retail outlets in India	Product Bundling Offers	Ghosh, P. et. al., (2010)
6	Would Indian consumers move from kirana stores to organized retailers when shopping for groceries	Proper parking facility	Goswami, P. and Mishra, M.S. (2008)
7	The India Retail Story	Cleanliness of the Store	India Retail Report (2009)
8	Emerging Trends in Retail Sector	proper weighing	Jasola, M. (2007)
9	A Strategic Framework for Consumer Preferences towards Emerging Retail Formats	Shopping Environment	Kiran and Jhamb (2009)
10	Consumer Awareness and Consumption Pattern of Food products in Haryana	quality with variety	Singh, H. (2007)
11	Retailing Management, Text & Cases	Status	Swapna Pradhan (2009)
12	Consumer switching behavior in organized retail stores: An Empirical Analysis	Attractive packing's	Clement, J., Kodimela P (2011)
13	Organised retail sector: Future. challenges and opportunities in India	Supportive sales personnel	Kumar, P. (2013)
14	Customer participation in retail-focus on automated services	Relations with the shopkeeper	Maki, M., Kokko T. (2012)
15	A study on Customer's satisfaction towards service quality of organized retail stores in Haryana	Bargain Facility	Manju, Malik (2012)
16	Importance of retail service attributes: A study on Indian Consumers	Discount offers	Mishra, M., Dash, U. (2008)
17	The factors predicting buying behavior in organized retailing: A study with Special reference to malls in Noida and Greater Noida	Easy availability of products	Raut, M., Dash, S. (2011)
18	Service Quality at Retail Stores- Consumer's Perception	Home delivery	Prabha Devi, P., Sellappan, R. (2009)
19	Customer perception regarding purchase behavior towards malls: A study of Noida and Ghaziabad	Easy replacement of defected products	Srivastava, A., Matta, M. (2012)
20	Determinants of retail patronage: a meta-analytical perspective	Better display of items	Pan, Y. & Zinkhan, G.M. (2006)

**V. NOMINAL GROUPING TECHNIQUE (NGT)**

Brainstorming has arguably become the most widely known and used term associated with creativity and creative problem solving (Isaksen and Gaulin, 2005)A brainstorming session has been conducted with seventeen participants, eleven senior managers from retail sectors and six from academia. The brainstorming session consisted of a prioritizing exercise, where each participant anonymously selected ten factors from the given survey questionnaire of 20 statements that they felt were the most important factors affecting retail sectors .The ranks for each of the selected responses were summed across participants to derive a group level result (Table 1) in ordinal scale.

**Table-1: Responses from Brainstorming**

Sr. No	Factors	Numbers of Vote	Ranking
1	Convenient timing	18	3
2	Credit Availability	7	8
3	Immediacy of the store	17	4
4	Proper packaging of products	5	12
5	Product Bundling Offers	20	2
6	Proper parking facility	5	13
7	Cleanliness of the Store	1	20
8	proper weighing	1	19
9	Shopping Environment	8	7
10	Quality with variety	14	6
11	Status	4	16
12	Attractive packing’s	3	17
13	Supportive sales personnel	6	11
14	Relations with the shopkeeper	21	1
15	Bargain Facility	7	9
16	Discount offers	16	5
17	Easy availability of products	6	10
18	Home delivery	4	15
19	Easy replacement of defected products	5	14
20	Better display of items	2	18
	Total	170	

**The ISM methodology consists of the following important steps**

1. Development of structural self-interaction matrix (SSIM);
2. Construction of reachability matrix;
3. Carrying out level partitions;
4. Obtaining classification of factors; and
5. Formation of ISM.

Here, a contextual relationship of “leads to” is chosen. For developing contextual relationships among variables, the opinion of total seven experts, fiive from industry and two from academia, have been taken. For expressing the relationship between different critical factors for the performance of retail sectors, four symbols have been used to denote the direction of relationship between the parameters i and j (here i, j):

1. V – parameter i will lead to parameter j;
2. A – parameter j will lead to parameter I;
3. X – parameters i and j will lead to each other; and
4. O – parameters i and j are unrelated. Finally SSIM has been formed (Table-1).

**Table-2: Structural Self Interaction Matrix**

Critical Success Factor	Factor Number	9	14	10	1	16	2	15	3	5
Shopping Environment	9		V	V	V	V	V	V	V	V
Behavior and attitude towards customers	14			X	V	V	V	V	V	V
Understanding customer needs and problems	10				V	V	V	V	V	V
Brand and flavors	1					X	X	X	V	V
Price differentiation	16						X	X	V	V
Uniqueness	2							X	V	V
Price	15								V	V
Immediacy of the store	3									V
Product Bundling Offers	5									

**Table-3: Reachability Matrix**

Factor No	9	14	10	1	16	2	15	3	5
9	1	1	1	1	1	1	1	1	1
14	0	1	1	1	1	1	1	1	1
10	0	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1
16	0	0	0	1	1	1	1	1	1
2	0	0	0	1	1	1	1	1	1
15	0	0	0	1	1	1	1	1	1
3	0	0	0	0	0	0	0	1	1
5	0	0	0	0	0	0	0	0	1

The SSIM has been converted into a binary matrix, called the reachability matrix by substituting V, A, X and O by 1 and 0. The substitution of 1s and 0s are as per the following rules:

1. If the (i, j) entry in the SSIM is V, the (i, j) entry in the reachability matrix becomes 1 and the (j, i) entry becomes 0.
2. If the (i, j) entry in the SSIM is A, the (i, j) entry in the reachability matrix becomes 0 and the (j, i) entry becomes 1.
3. If the (i, j) entry in the SSIM is X, the (i, j) entry in the reachability matrix becomes 1 and the (j, i) entry also becomes 1.
4. If the (i, j) entry in the SSIM is O, the (i, j) entry in the reachability matrix becomes 0 and the (j, i) entry also becomes 0.

The reachability matrix for the success factors is shown in Table 3, developed by using the above rules. Table 8 also shows the driving power and dependence of each variable is also shown. Driving power for each variable is the total number of variables (including itself), which it may help to achieve. On the other hand, dependence is the total number of variables (including itself), which may help in achieving it. These driving power and dependencies will be later used in classification of variables into the four groups: autonomous; dependent; linkage; and driver variables (independent).



**A. Formation of Interpretive Structural Model**



Fig.-1: Interpretive Structural Model

The interpretive structural model is generated by means of vertices or nodes and lines of edges from the final reachability matrix (Table2). If there is a relationship between factors i and j, this is shown by an arrow which points from I to j. This graph is called a directed graph or digraph. After removing the transitivity, the digraph is finally converted into ISM as shown in Figure 1. The interpretive structural model represents the structural relationship among the different critical success factors.

**VI. RESULTS AND DISCUSSIONS**

Performance of retail sectors in India has the potential for improving their performance dramatically and contributes to the local as well as global society. Housewives perceive these traditional grocery stores more favourably on the variables of “Overall Perception”, “Routine” and “Near to Residence /Office” which imply that these housewives are quite favourable in their buying from these traditional stores and it has become a routine to buy from these stores which is also quite remarkable as housewives are the most involved customer group with respect to grocery purchase situation. But on the variable of “Favours” the traditional grocery stores are perceived by the housewife not as favourably as compared to other occupation buyers meaning that housewives are not able to perceive getting favourable treatment from these stores and stores are required to demonstrate that they give preferential treatment and hard benefits like price benefit, quality advise related to grocery product and usage to their regular female buyers. Business occupation buyer are not very positive in their perception as they are seeking hard and substantial benefits and simply near to residence/ office is not enough because they might travel a distance to buy grocery if they perceive getting considerable benefits from it. So it calls for traditional store should need to demonstrate providing substantial benefits to its regular customer by displaying the advantages vise organized stores.

**VII. CONCLUSION**

buyers on “Favourable Return Policy”, “Fairness in Dealing” and “Good Selection of Merchandise” which is a caution to traditional stores that they need to work on their assortments in the light of advent of organized retail outlets and should work on improving perception of fairness in dealing by adopting modern weighing scales and by providing clear information to these customers. Also lower education buyers perceive these stores not as positive on “Price Discounts”, “Good Discounts” and “Inform about New Offers” which calls for extra efforts from these stores towards low education buyers who are not so confident and demanding during their purchase. It is required that the traditional stores should try demonstrating that they treat all the regular customers fairly so as improve the relationship with their regular customers. It is clearly seen from the analysis that higher education buyers are not as positive as lower education. The paper provides an interpretive structural model to develop a map of the complex relationships and magnitude among identified critical success factors. In addition, the identified critical success factors in this research will help in formulating the right strategy for enhancing the retail performance of Indian retail sectors.

Concerning future investigation, we suggest that a similar study for non-grocery retailers can be undertaken; it would also be interesting to compare various formats of organized retail. Finally, it would be interesting to study thoroughly and separately, both the kiranas that were negatively affected by organized retailers and the kiranas who have not suffered from the impact.

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**UPI PAYMENT SYSTEM: AN EMERGING INDIA**

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**ABSTRACT**

*Money in hand has more value than the money we get in future. Earlier sending and receiving money had many obstacles and many companies had to shut down their business due to increase amount of money in the hands of debtors, as debtors were not able to transfer money. Indian economy is growing and to maintain this growth more and more circulation of Money is needed. In earlier years transfer of money was very difficult and many rules were there. But all this has changed with the introduction of UPI payment system. One of the visions of Prime Minister Narendra Modi is to make India cashless, this has some have made possible with the introduction of UPI. Based on IMPS and regulated by the Research Bank of India, UPI has provided necessary infrastructure for banks, mobile wallets and telecom operators to provide seamless payment services to the common man of India who are well connect with smartphone. On 16, August, 2016 UPI 2.0 was introduced by National Payment Corporation of India (NPCI) to facilitate instant fund transfer. With the introduction of UPI money transfer has become very convenient and current statics shows that 129 banks are active in UPI with Rs. 627.75 Million volume and Rs. 1,09,932.43 cr amount In Jan 2019. This study will help us to understand how UPI is making India Cashless.*

*Keywords: Unified Payment system (UPI), IMPS (Immediate payment services), NPCI (National Payment Corporation of India), Cashless.*

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**INTRODUCTION**

Need to make payment for goods and services was there from the evolution of Human being. Earlier there was barter system and later coins and latter paper currency were used for the same, now with the development of technology and Internet humans has found a new way of payment system. Wireless and Mobile technology have changes in such a way that all people are using smartphone to do transactions. National Payment Corporation of India (NCPI) conducted a pilot study in April 2016 in which 21 banks participate to start a Unified Payment System. Unified Payment System (UPI) was officially introduced by National Payment Corporation of India (NCPI) on 16 August 2016, this system helps to transfer money through mobile device round the clock 24\*7 and 365 days. Before this system, NEFT was used to transfer money and which takes around 3 to 4 hours to credit money in other persons account. UPI system is faster and better than other systems. It is also very easy, prompt and free to use. The most advantage of UPI is that the payer and payee do not have to share any sensitive bank details as credit/debit card details in order to make payment. To facilitate UPI, banks provides a VPA (Virtual payment address to its customers, which acts as a unique identifier across all banks. VPA is similar to an E-mail address and is very simple to use and share. VPA is the only thing that needs to be shared. The necessary authorization to make payment happen through the bank's own website/App. A PIN (UPI Personal Identification number) may be required to confirm each payment. A single UPI app can allow access to multiple bank accounts and access many banking features. Introduction of the UPI digital channel and launching of the BHIM app has been one of the most important achievement of the Government of India.

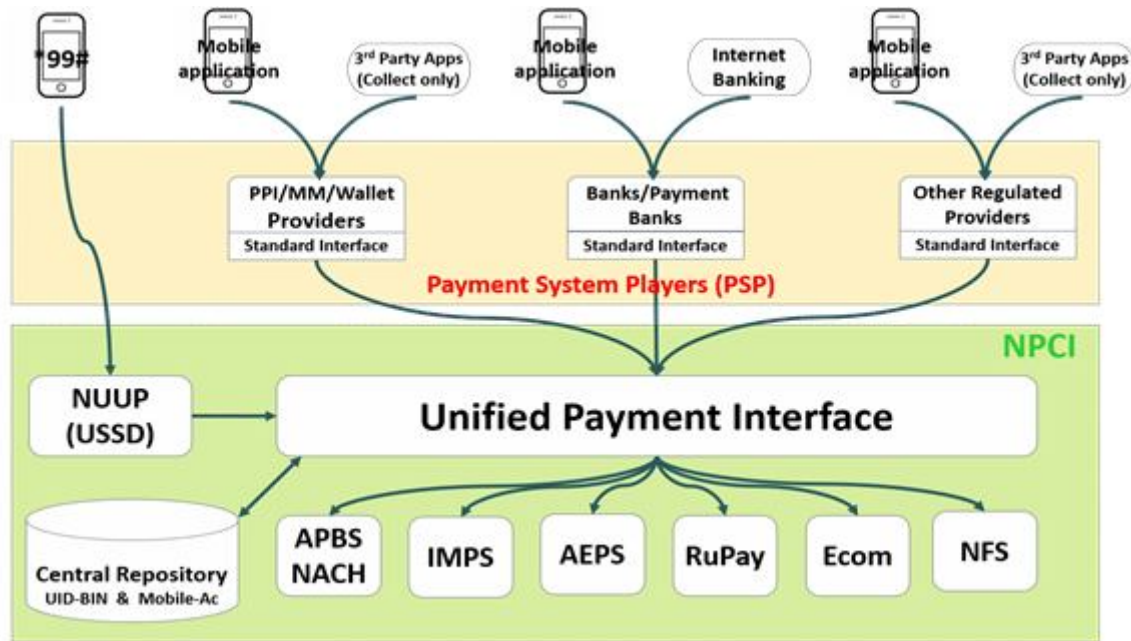
**OBJECTIVES OF UPI**

- 1) To leverage on high penetration of Mobile phones for offering non-internet based mobile banking service.
- 2) To provide safe, secure, cost effective, 24X7X365, real-time, access to banking services.
- 3) Unifying USSD system with UPI platform for interoperability
- 4) To be a catalyst in facilitating financial inclusion process and to provide banking services to even last mile customer
- 5) One Step onboarding process allowing users to send /receive money

**FEATURES OF UPI**

- 1) Standardized Menu for Banks and Customers
  - 2) Facilitates interoperable mobile banking transactions
  - 3) Works across all handsets(Basic & Smartphones) & GSM service providers
  - 4) Works without internet and service available while roaming as well
-

ARCHITECTURE OF UPI



Transaction Flow in UPI

1. Payer initiates transaction through his PSP application at his Device.
2. Payer provides authentication credentials at his Device.
3. The Payer Device initiates the Pay request to Payer PSP system.
4. Payer PSP validates the Payer details and validates the first factor authentication.
5. Payer PSP sends the pay request to NPCI.
6. NPCI resolves the Payee Address in the following two ways
  - a. If the Address has global identifiers (Mobile #, Aadhaar # or Account #) then the Payee Address is resolved by NPCI central Mapper.
  - b. If the Address has virtual address offered by Payee’s PSP, then NPCI will send the request to Payee’s PSP for address translation.
7. In case of 6b, the Payee PSP accepts or rejects the request based on the rules set at his end.
8. In case of 6b, on accepting the Pay request, Payee PSP populates the Payee details and responds to NPCI.
9. NPCI sends the debit request to the debit account provider.
10. Account provider authenticates the Payer based on the credential provided.
11. Account provider debits the Payer account.
12. Account provider sends Debit response to NPCI.
13. NPCI sends the Credit request to the credit account provider.
14. Account provider credits the account based on the Payee details.
15. Account provider sends Credit response to NPCI.
16. NPCI sends Pay response to Payee PSP.
17. NPCI sends pay response to Payer PSP.
18. Payer PSP notifies payer.

**CASE STUDIES OF UPI TRANSACTIONS**

**Sending money to relative**

A migrant worker, Shyam, living in Kerala having an account with State Bank of India, using his low cost Android phone, can send money to his wife, Laxmi, in a village via her Aadhaar number with single click. Here is how it works:

1. Shyam gets an account created in SBI using paperless Aadhaar e-KYC option. He also provided his mobile phone during application.
2. His wife, Laxmi, has also opened an account in Bank of India using Aadhaar e-KYC.
3. If he has not obtained an MPIN, he can use \*99 (NPCI USSD service accessible across country) on his phone to set first time MPIN using his RuPay card and expiry.
4. He downloads SBI mobile application and uses MPIN to set his profile up.
5. SBI mobile application is now integrated with unified payment interface at NPCI and offers convenient features to send money, collect money, and manage integrated address book.
6. He adds his wife's Aadhaar number to his address book. No other information such as IFSC code, etc. are required to be stored for his wife.
7. On the mobile application, using a single click on his address book entry of his wife, he enters an amount and click send. SBI application allows him to remember the amount for future use.

**Case 2**

**Collecting money from friend**

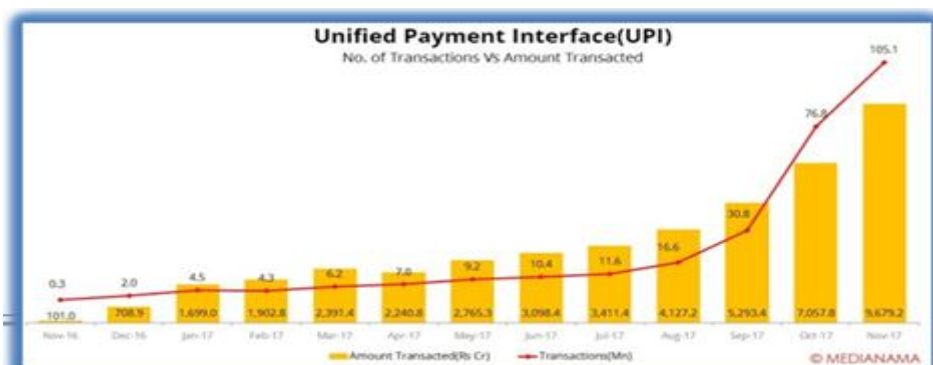
Two friends Rahul and Karan go out for dinner and Rahul pays the bill. They agree to split the bill in half. Rahul wants to collect half of the bill from Karan and uses his android mobile phone to do so and requests Karan to pay in a week's time. Here is how it works:

1. Rahul logs on to his Punjab National Bank (PNB) mobile app.
2. Rahul initiates collect request by providing Karan's address which in this case is karan.444@icici.
3. Rahul enters the amount to be paid by Karan.
4. Karan gets a message on his phone stating that there is a collect request from Rahul for a given amount. Karan's PSP also shows Rahul's full name as in the Aadhaar system which was verified during Rahul's on boarding.
5. Karan is in a meeting, so he snoozes the request and decides to attend it later. Since the request had specified that it can be paid within a week, Karan's mobile application allows such snooze and reminder features.
6. His mobile application reminds him after the snooze period.
7. He accepts the collect request, provides biometric credential using his biometric enabled smartphone, and authorizes the payment.
8. Rahul receives the confirmation of payment.

**CURRENT STATISTICS OF UPI TRANSACTIONS**

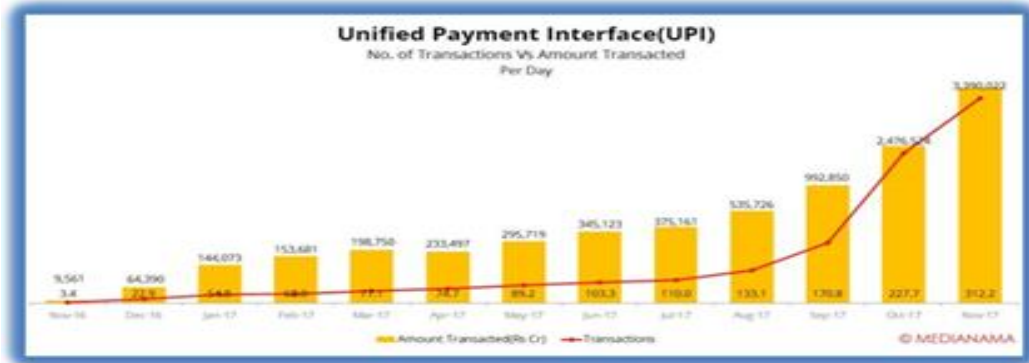
The Unified Payment Interface (UPI) saw a 37% growth in the total transaction volumes taking place between October and November 2017, according to data published by the National Payments Corporation of India (NPCI). The NPCI is a company owned by Indian banks and owns and operates payments systems such as UPI and IMPS.

**1) Number of Transactions Vs Amount Transacted**



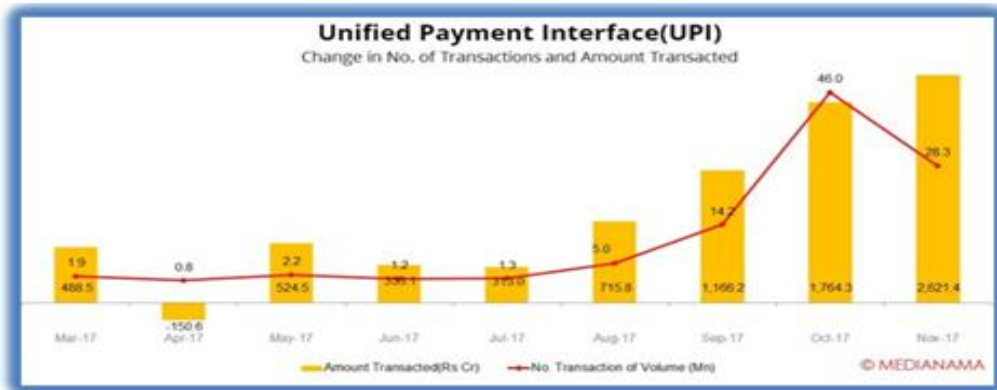
The total number of transactions in November were around 23 times higher than they were at the end of January 2017. The amount transacted increased by 37% to Rs 9,679 crores over October 2017. The amount transacted in November 2017 was 5.6 times higher than what it was in January 2017. In November, the number of transactions and amount transacted occurred per day as a result both were at their highest peak, though average amount per transaction has been decreasing since, March 2017.

**2) Number of Transactions Vs Amount Transacted per day**



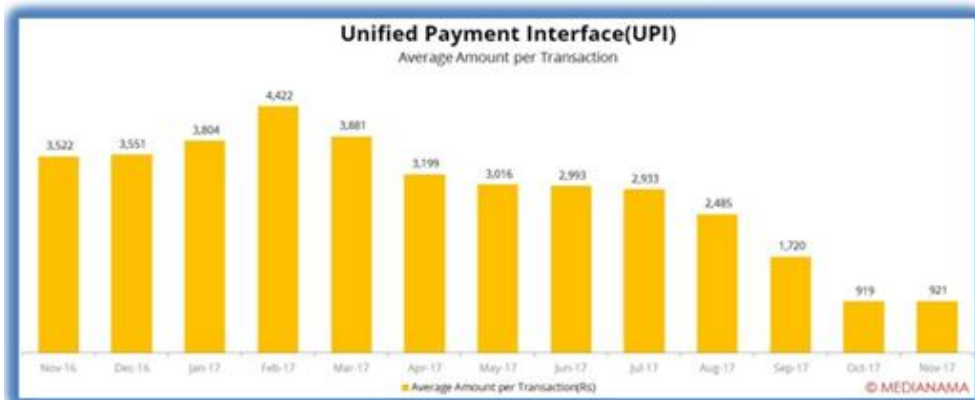
UPI transactions have been growing since launch. There appears to have been a hockey-stick effect that has taken place in the last three months. Note that Google Tez launched on September 18th, and has reported 30 million transactions in 5 weeks since launch, apart from 7.5 million users. Note that the chart above shows a slight dip in February. However, if you look at UPI transactions on a per day basis for each month, there has been a continuous increase, as indicated in the above chart.

**3) Change in number of Transactions and Amount Transacted**



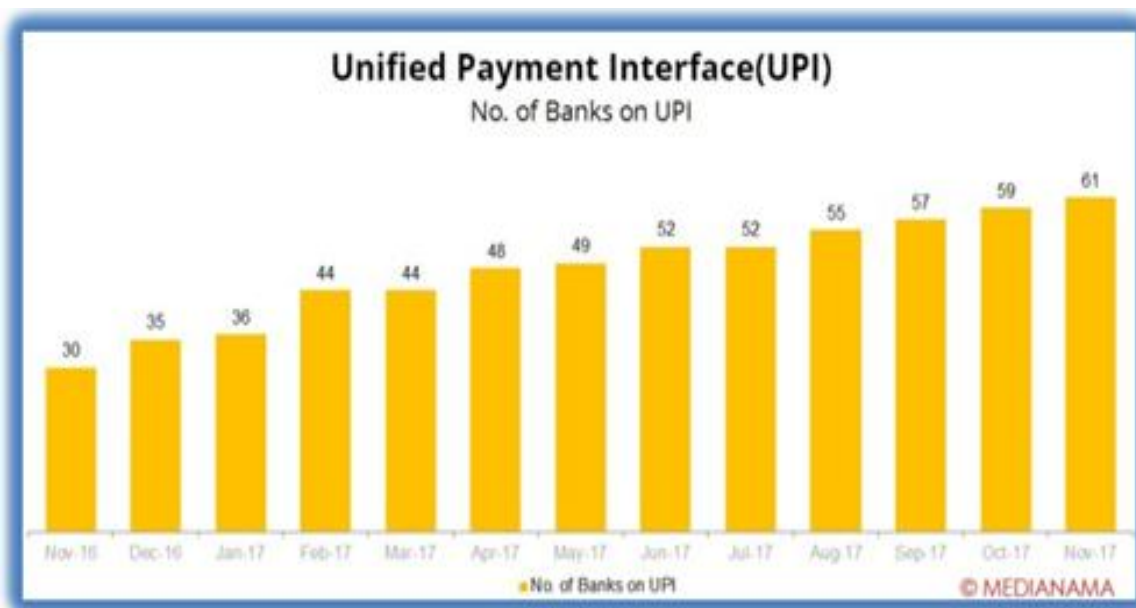
The number of transactions grew by 28.3 million in November 2017 whereas the total amount transacted increased by Rs 2,621 crores. In the October 2017, volume had increased by 46 million and amount transacted had grown Rs 1,764 crores.

**4) Average Amount per Transaction**



The average amount per transaction grew to Rs 921 for November 2017, it has been trending down, with an increase in the number of transactions. Even then, it has been remained above of Rs 800 mark.

## 5) The number of banks on UPI

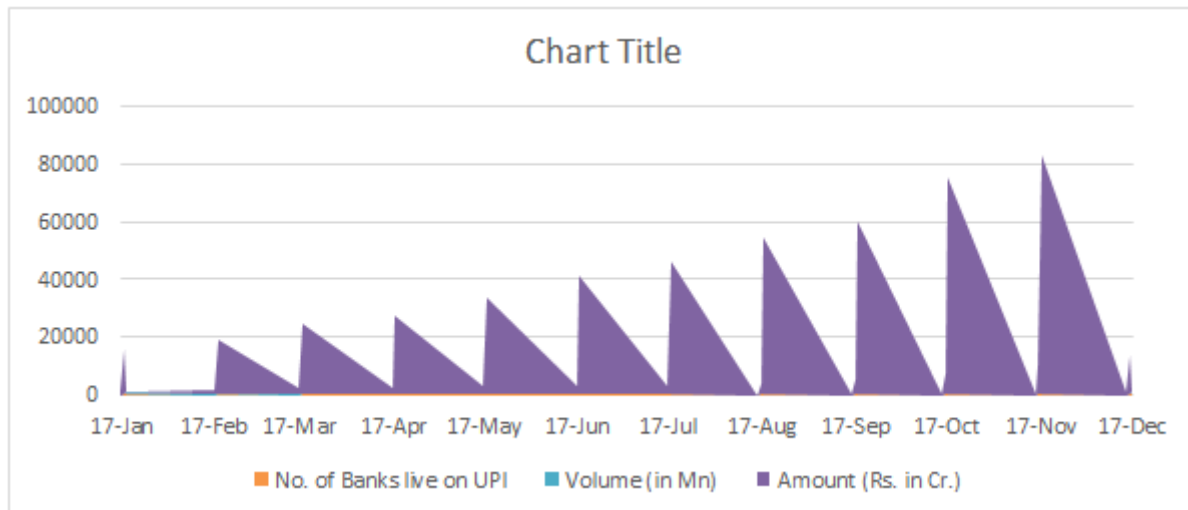


The number of banks on UPI increased to 61 in November 2017.

## STATISTICS OF UPI TRANSACTIONS

Table showing increasing in UPI transaction and Amount

Month	No. of Banks live on UPI	Volume (in Mn)	Amount (Rs. in Cr.)
19-Jan	129	672.75	1,09,932.43
18-Dec	129	620.17	1,02,594.82
18-Nov	128	524.94	82,232.21
18-Oct	128	482.36	74,978.27
18-Sep	122	405.87	59,835.36
18-Aug	114	312.02	54,212.26
18-Jul	114	235.65	45,845.64
18-Jun	110	246.37	40,834.03
18-May	101	189.48	33,288.51
18-Apr	97	190.08	27,021.85
18-Mar	91	178.05	24,172.60
18-Feb	86	171.4	19,126.20
18-Jan	71	151.833	15,571.20
17-Dec	67	145.463	13144.3
17-Nov	61	104.841	9679.2
17-Oct	60	76.772	7057.8
17-Sep	57	30.778	5293.4
17-Aug	55	16.608	4127.2
17-Jul	53	11.444	3381.2
17-Jun	52	10.155	3067.1
17-May	49	9.168	2765.4
17-Apr	48	7.005	2240.8
17-Mar	44	6.161	2391.4
17-Feb	44	4.156	1902.1
17-Jan	36	4.153	1658.8
16-Dec	35	1.967	706.2
16-Nov	30	0.285	100.5
16-Oct	26	0.103	48.6
16-Sep	25	0.085	32.6
16-Aug	21	0.093	3.1



The transaction volume grew by 8.5 percent to Rs 1.09 lakh crore in January, up from Rs 1.02 lakh crore in the month of December 2018. December was also the month when UPI recorded over 600 million transactions for the first time ever, the report states.

UPI was introduced by NPCI in 2016 as a platform that powers multiple bank accounts into a single mobile application. UPI got a significant boost when the BHIM app was launched by the Central government on the 30 December 2016. Since then, NPCI has taken steps to cut down fraudulent transactions and introduced many regulatory guidelines.

### CONCLUSION

Introduction of UPI system has changed the payment system of India. A new and young India has woken up to the benefits of cashless and digital payments. UPI based mobile apps have brought the benefits of financial inclusion to masses of people who did not had access to the banking channels. UPI has helped to reduce the transactional cost for all the parties. Digital payment system had made payments very easy and which had induced the growth of business itself. Even though cash is still king in market but in coming years UPI will take over the first position in the market and India will become cash less.

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**BEHAVIOUR OF MOTORCYCLE USERS TOWARDS VEHICULAR AIR POLLUTION: A STUDY WITH REFERENCE TO JALGAON CITY****Mukesh Ahirrao<sup>1</sup> and Dr. Vishal S. Rana<sup>2</sup>**Assistant Professor<sup>1</sup> and Associate Professor<sup>2</sup>, S. S. B. T's College of Engineering & Technology, Jalgaon

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**ABSTRACT**

*Air pollution is most important issue in the 21<sup>st</sup> century among all others. There is no need to reiterate it's important. Ample references are available in literature review on air pollution, its causes, impact and different types of air pollutants. It is also important to study behavior of motorcycle users towards air pollution that is basically being caused by vehicles used by them. As irregular and improper maintenance of vehicles are contributing to more air pollution.*

*This study is based on both primary and secondary data. Secondary data is used to conceptualize it and primary data is collected to analyze the behavior of motorcycles users in Jalgaon city towards cause of air pollution. Study reveals that awareness and attitude of motorcycle users in Jalgaon city towards air pollution is positive but it lacks actions from their side to minimize the pollution. Study covers various policy measures to control the same with emphasis on common directed efforts of human society.*

*Keywords: Air Pollution, Vehicle Air Pollution, Motorcycle Air Pollution Etc.*

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**I. INTRODUCTION: AIR POLLUTION**

Air pollution is most important issue in the 21<sup>st</sup> century among all others. There is no need to reiterate it's important. Ample references are available in literature review on air pollution, its causes, impact and different types of air pollutants.

Air pollution is described as contamination of the atmosphere by various substances that cause danger to health and welfare of plants, animals, material resources & property on earth. It reduces the capacity of earth to reproduce and contaminates biodiversity. Almost all economic activities of human society are source of air pollution directly or indirectly but major of them are transportation sources, stationary sources, industrial processes, solid waste disposal, forest fires, and coal mining many more. The major pollutants released by all these sources contain carbon monoxide (CO), lead (Pb), nitrogen oxides (NO<sub>x</sub>), ozone (O<sub>3</sub>), particulate matter, sulfur dioxide (SO<sub>2</sub>). These substances last long time in environment<sup>[4]</sup>.

**II. NEED OF RESEARCH**

Transportation is the major contributor of air pollution. More than half of the carbon monoxide and nitrogen oxides, and almost a quarter of the hydrocarbons emitted into our air by transportation sector in 2013<sup>[13]</sup>.

According to Road Transport Year Book (2011-12), the population of motorcycle in developing country against developed countries is four times greater. As well as population of motorcycles in India is 72 % of total vehicle population<sup>[7]</sup>. This signifies that contribution of motorcycles in developing country specifically in India is significant in nature. It also indicates the seriousness of air pollution in developing countries because minimizing air pollution in developing country means reducing the living standards of developing country.

Air pollution has multiple corners. It is not only a scientific process but also has some behavioral as well as social corner. Air is polluted through the industrial and mechanical process of human societies. Human behavior as well is a most important contributor in air pollution. Though pollutants are released by industrial and mechanical process, its proportion can be controlled through human care. Proper maintenance of machines and plants can be subjected to control the emission of many pollutants in the atmosphere<sup>[1]</sup>.

Therefore, it is important to study pattern of behavior of motorcycle users towards air pollution that is basically being caused by vehicles used by them. As irregular and improper maintenance of motorcycles and vehicles are also important contributing factor of air pollution.

**III. OBJECTIVES OF THE STUDY**

- To study behavioral aspects of motorcycle users towards air pollution in Jalgaon City

**IV. HYPOTHESIS OF THE STUDY**

- 70 % motorcycle users take precautions to control air pollution through their motorcycles.

## V. REVIEW OF LITERATURE

### A. GOVERNMENT INITIATIVES

Over the last few decades since the environmental issues are gaining importance in human society, govt. is taking all appropriate initiatives to control the air pollution by forming policies on controlling air Pollution, enacting laws securing environmental sustainability, restricting industrial and transportation activities that are causing air Pollution, providing sufficient infrastructural support as well to implement all these initiatives and achieve the goals in this regard. Not only the federal govt. but also state and local agencies are also responsible to this. The outcomes of all these initiatives are positive in some cases. E.g. emission standards forcing vehicle manufactures to improve the core technology so that it will minimize the emission of pollutants from the exhaust of vehicles. But all these efforts are not sufficient as adequate support is not available from the large number of people. As many times environmental concern is disregarded for some kind of benefits. Similarly according to Mukesh Khare & et. Al., (2015), developing countries are deficient in establishing an integrated Urban air quality management plan <sup>[5]</sup>.

### B. PUBLIC EDUCATION

Education facility in relation to environment science is offered almost in all countries. But there is no provision of education to the people those seeking driving license from govt. In many developing countries including India, Pakistan, Nepal and Shrilanka, driving license in any vehicle category is offered without any inspection of the awareness of applicants towards air pollution. Driving schools as well does not provide any type of education and training to control the air Pollution through vehicles maintenance. Also there are no laws enacted to control and administer the quality of driving schools though out the India <sup>[1]</sup>.

### C. PUC TEST & CONTROL

Pollution under Control [PUC] tests is administered almost in all countries. The rules for granting PUC test agents are devised with due care. As per the provisions for administering the PUC test, PUC test agents' needs to report the vehicle number to district R.T.O office for the necessary actions. But PUC centers hardly this comply provision. Similarly, it is possible to educate the vehicle users with pollution control measures at the time of administering the PUC test.

Again there are issues with PUC centers as many times bogus PUC certificates are issued by the centers. This denotes serious lacunas in monitoring and controlling the PUC test centers as audit of PUC centers is just the formality in many cases <sup>[9]</sup>.

### D. VEHICLE REGISTRATION PROCESS

In India vehicle users are required to pay tax only one time at the time of registration. The State Govt. of Karnataka has introduced a Green tax. Commercial vehicles older than 7 years and private vehicle older than 15 years required to pay tax every year at the time of fitness and safety check every year. This ensures a strict monitoring of old vehicles which are more associated with air pollution. Also in India there is no such provision that will limit the use of vehicles for limited time as in case of other developed countries <sup>[6]</sup>. According to Keiko Hirota, Asian countries are facing major air pollution problems due to rapid economic growth, urbanization and motorization. He emphasizes that monitoring problems such as vehicle registration systems, inspection and maintenance (I/M) systems and fuel quality monitoring systems for vehicles in use. Monitoring problems in developing countries share similar characteristics such as a weakness in government initiatives and inadequate operation of government agencies, which results from a lack of human resources and availability of adequate facilities <sup>[3]</sup>.

## TECHNOLOGY

According to the study of Al- Momani & Al-Nasser, emissions of different air pollutants are subject to change in technology of fuel supply system, model year, engine capacity. Vehicles with carburetor fuel supply system have strong relationship with emission of pollutants <sup>[2]</sup>.

## VI. RESEARCH METHODOLOGY

**A. Type of Research:** This study is descriptive in nature using both primary and secondary data. Secondary data is used to conceptualize the objective, nature and scope of the survey. And primary data is used to collect actual facts regarding proposed problems in objectives.

**B. Types of Data:** Primary data is collected through structured questionnaire. Primary data includes motorcycle usage of people in Jalgaon city. Similarly secondary data were collected through various sources such as official's reports, working papers, official manuals, research papers & websites etc. most of the secondary data is collected through internet.

**C. Sample Size:** Feedback is collected from 90 samples. Total 103 feedbacks were collected and out of which 13 incomplete filled questionnaires were rejected.

**VII. DATA ANALYSIS & INTERPRETATION:**

**A. Frequency of Oil Change**

**Table-1: Frequency of Oil Change**

Sr. No.	Oil Change	Frequency	% Frequency
1	4 Months	40	44.90
2	6 Months	40	44.90
3	1 Year	7	8.16
4	> 1 Year	2	2.04
	<b>Total</b>	<b>90</b>	<b>100.00</b>

Source: Primary Data

Table 1 clearly reflects that 89.80 % motor vehicle users change engine oil on time. Timely change of oil reduces the burning of carbon in engine block and it minimizes the carbon emission.

**B. Frequency of Refill air in tyre**

**Table-2: Frequency of refill air in tyre**

Sr. No.	Refill Tyre Air	Frequency	% Frequency
1	4 Months	61	67.35
2	6 Months	7	8.16
3	1 Year	7	8.16
4	More than 1 Year	15	16.33
	<b>Total</b>	<b>90</b>	<b>100</b>

Source: Primary Data

Table 2 reflects that 75.51 % motorcycle users check and refill air in tyre on regular basis. Right pressure of air in tyre also minimizes the excessive burning of fuel in engine and it minimizes the burning of carbon in engine.

**C. Attitude: I should spend extra money to minimize air pollution.**

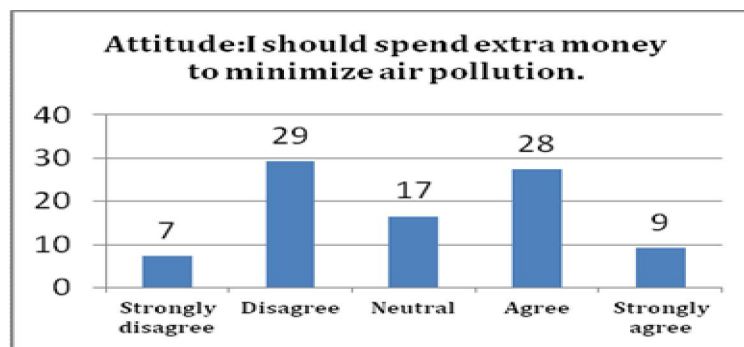


Figure-1: Attitude

Figure 1 also describes the attitude of respondents to spend the extra money so as to minimize the air pollution. 40.82 % respondents are ready to spend extra to control the air pollution. As well as same % respondents rejected to same.

**D. Precautions taken by Vehicle Users to control Air Pollution**

**Table-3: Precautions taken by users**

Sr. No.	Precautions taken by Vehicle Users to control Air Pollution	Frequency	% Frequency
1	Keep Moderate speed	9	10.20
2	Regular Service	53	59.18
3	Both of the Above	18	20.41
4	No Precautions Taken	9	10.20
	<b>Total</b>	<b>90</b>	<b>100.00</b>

Source: Primary Data

Table 3 denotes that 10.20 % respondents keep moderate speed to minimize the air pollution, 59.18 % respondents believe in regular service of motorcycle user whereas only 20.41 % respondents take all necessary precautions so as to avoid air Pollution. 10.20 % agree that they don't take any precautions.

**VIII. TESTING OF HYPOTHESIS**

**H<sub>0</sub> = 70 % motorcycle users take precautions to control air pollution through their motorcycles.**

- H<sub>0</sub>: P = 0.70 & H<sub>a</sub>: P ≠ 0.70
  - Expected Probability of success (p) = 0.70
  - Expected Probability of failure (q) = 0.30
  - Sample Size (n) = 90
  - Observed frequency of success = 81
  - Observed frequency of failure = 09
  - Level of significance = 5 %
  - P<sup>^</sup> = Proportion of success. (P<sup>^</sup>) = 81/90 = 0.900
  - The H<sub>0</sub> is two sided
  - Z Test Statistics =  $Z = (P^{\wedge} - P_0) / \sqrt{P_0 (1 - P_0) / n}$ .....(Simple one sample Z Test)
- = 0.900 – 0.70 /  $\sqrt{0.70 (1 - 0.70) / 90}$
- = 4.140393

**IX. FINDINGS**

1. In spite of having govt rules and regulations, air pollution is an important issue in human society. Problem of air pollution is a complex one and it requires contribution from each stake holders of society specifically transport sector in an integrated manner.
2. From the above analysis it is clear that pre & post purchase behavior of motorcycle owner / user as well as behavior of other entities acting in the subsystem of transportation sector may be the important contributing factor in air pollution if proper use and care of vehicle is not taken by them.
3. PUC centers are not serious during administering the test. As they are doing formality of their work.
4. Proper care is not taken by govt at the time of granting driving license. Driving license is granted without any inspection of mental qualification of applicant towards the adequate awareness of air Pollution.
5. Similarly no formal policies and regulation exist to administer the grading of driving schools and quality of their education and training. Further no standard curriculum of driving schools exist neither it cover any portions to create awareness among learners.
6. The maintenance habits of motorcycle users in Jalgaon city are moderately good and they take proper care of their vehicles. 75 % - 80 % motor cycle users change engine oil as well as refill air in tyre on time. That is a positive behavior to control air pollution.
7. Statistics about the attitude is reflecting same conditions. Attitude of nearly 50 % respondents are positive as they are ready to spend extra money to minimize the air pollution.
8. Further analysis denotes that only 50 % respondents take proper precautions to control the air pollution causing their vehicles.

**X. SUGGESTIONS**

Controlling air pollution is the responsibility of entire society. And all stake holder of society specifically transport sector is required to act in integrated manner with due sincerity.

1. No driving license should be granted unless applicants reasonably possess knowledge and practical aspect of vehicle use in relation to pollution.
2. Old vehicles are more associated with pollution; minimum usage life of vehicle in years should be stipulated by govt. old vehicles should be subjected to regular annual check so that it can be discarded on time.

3. In spite of collecting one time vehicle tax from vehicle owners; it is suggested that such tax be collected annually. This will provide govt officials with additional check points to control the behavior of vehicle users and subsequently air pollution.
4. PUC centers are also an important factor in this regard. To ensure the proper compliance of rules, there should be heavy penalty imposed on those who purposely fail to comply with it. Also PUC centers should be subjected to strict audit system. And frequency of such audit should be increased. There should be provisions to include the public representatives in such audit team.
5. RTO department and other govt agencies should be made compulsory to public the statistical data on the compliance of such provisions. Specifically those who do not comply must be exposed in public.
6. It is also recommended that no vehicle should be allowed to refill fuel unless it produces the PUC certificate.
7. Awareness of air pollution can be created among vehicle users through printing ideal usage conditions of vehicle on PUC certificates.
8. A RTO department should modernize their data storage and mining. It would be possible to them to retrieve the list of old vehicle so that they can track the same. Old vehicles can be subjected to re-registration after the expiry of specific time period.
9. Public education & training is also important part in this regard. Govt with the help of society and NGO's can provide training to vehicle users through driving schools. There is need to have proper regulations to control the curriculum and other teaching learning aspects of driving schools similar to other technical education in India. Similarly standard training to service people working in organized and unorganized sector is also required.
10. Similarly to increase the awareness and positive attitude of each type of stake holder of transport sector, it is suggested that govt. should establish the mechanism to monitor quality of air in each city and publish the air quality index on daily basis in local as well as national news papers. It will create curiosity among people and their attitude can be molded through such platform.

## XI. CONCLUSION

The analysis reveals that awareness and attitude of motorcycle users in Jalgaon city towards air pollution is positive. But nearly half of the respondents do not take proper precautions to minimize the severity of air pollution.

It is concluded that use of vehicle is very serious part of human behavior and it must resort in responsible hand. Air pollution is an integrated issue of human society and all human beings are responsible for that without any discrimination. In order to minimize the air pollution each stake holder in transport sector must be subjected to strict rules and regulation and it must be implemented strictly. For that purpose tight monitoring and auditing is required. There are ample avenues through which government can check the behavior of each stake holder in transport sectors.

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**FUTURE PROSPECTS OF E-BUSINESS IN INDIA: AN OVERVIEW**

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**ABSTRACT**

*The e-business concept is novel. The Indian traditional business model is engrossing the new technological approach in-order to cope up with the international market and vast growing Indian online market. Since, e-business scenario is recent in the Indian market; therefore, it is essential to know the scope and opportunities of the e-business in India.*

*The study shows enormous potential for E-Business in India. In total retail business online retailing is less than 5%. Indian e-business has a huge scope in the near future but there are some challenges to the growth of e-business in India like internet penetration and Internet users. E-business development depends on the availability of internet infrastructure in the country.*

*Keywords: E-Business, E-Commerce, Online Business*

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**I. INTRODUCTION**

E-business or Online business is the business transactions that take place online with the help of the internet. The term e-business came into existence in the year 1996. E-business is an abbreviation for electronic business. In the e- business model, the buyer and the seller don't meet in person, they complete their transaction online.

Now a day's e-business is no longer only applies to virtual companies (called click and mortar) all of whose activities are based on the Net, but also to traditional companies (called brick and mortar). Many of the business are now using both the modes for the business. They have traditional business setup with the modern e-business setup.

E- Business and ecommerce both the terms are distinct from each other. The term e-commerce (Electronic Commerce) is the only one of the aspects of e-business. But e-business is the broader concept. In India for e-business development there is huge scope and challenges that are focused in this study.

**II. OBJECTIVES OF THE STUDY**

- To study the different types of E-Business transactions
- To study the Scope for E- Business In India
- To study the key elements for the growth of e-commerce business in India

**III. THE GOAL OF E-BUSINESS**

The objective of any e-Business is to create value. Value can be created in different ways. One way is as a result of an increase in margins, i.e. a reduction in production costs or an increase in profits. E-Business makes it possible to achieve this in a number of different ways, including positioning on new markets; increasing the quality of products or services; prospecting new clients; increasing customer loyalty; and increasing the efficiency of internal functioning. Another way is increasing the customer satisfaction level. As a matter of fact, e-business favours: a drop in prices in response to increase in productivity; Customer feedback; products and services that are suitable for the client's needs; and a mode of functioning that is transparent for the user.

**IV. CLASSIFICATION OF E-BUSINESS**

E-business is categorized on the basis of which type of relationship exists between the business and the client as mentioned below

- **B2B (Business-to-Business)**

While one company doing business with another company using internet-enabled procedure, such as manufacturers are buying raw material from another raw material manufacturer, or a distributor is purchasing online from a manufacturer. Such B2B e- business is generally in big volumes, and price varies based on the quantity of the purchase order and is generally flexible and negotiable.

- **B2C (Business-to-Consumer)**

One company is selling goods or services online to the general public or directly to the customer typically through an eCommerce website or mobile application or over the Internet. An example of B2C portals

includes Amazon, Paytm, Myntra or Dell Computers. A B2C e-Commerce transaction would be an individual buying Clothes/garments through Myntra's website.

- **C2B (Consumer-to-Business)**

In this type a customer posts his requirement on a website or online platform, and then several companies provides the quotes based on such requirements. The consumer decision is based on the reviews all bid received from the seller. Customer finalizes the deal with the enterprise going to complete the requirement. C2B business involves consumers seeking products or services from a business/company. For example, indiamart.com

- **C2C (Consumer-to-Consumer)**

In this type customer deals with other customer. There are some sites which offer free classifieds listing where individuals can buy and sell and complete their transactions through website/ Apps such as Quikr or OLX. Such transactions called consumer to consumer transactions. Where users sell products to other prospective customers. Like one person is selling something that he or she no longer needs, and he completes the listing of that product the OLX, and another person who needs the same thing contacts the seller and get the transaction done.

## V. SCOPE OF E- BUSINESS IN INDIA

The scope of e-business in India is indisputably will increase in near future. A recent report by the Internet and Mobile Association of India shows that growth will be around 50% is to be expected in the coming five years.

The primary element of this growth is undoubtedly the rise of high speed (4G) mobile internet users and a large number of Smartphone users. The same mobile commerce is expected to change how business transactions happen in India. Many companies are now adopting the e-business models and strategies to grow their business. Currently there longer sustainability if anyone ignores the power of e-business.

Traditional customers are also moving to online transactions because of the unique advantages of online transactions it includes mainly delivery time, ease of transactions and several features served by e- businesses, there are some prototype models for example; drone delivery has been started in the foreign countries or artificial intelligence.

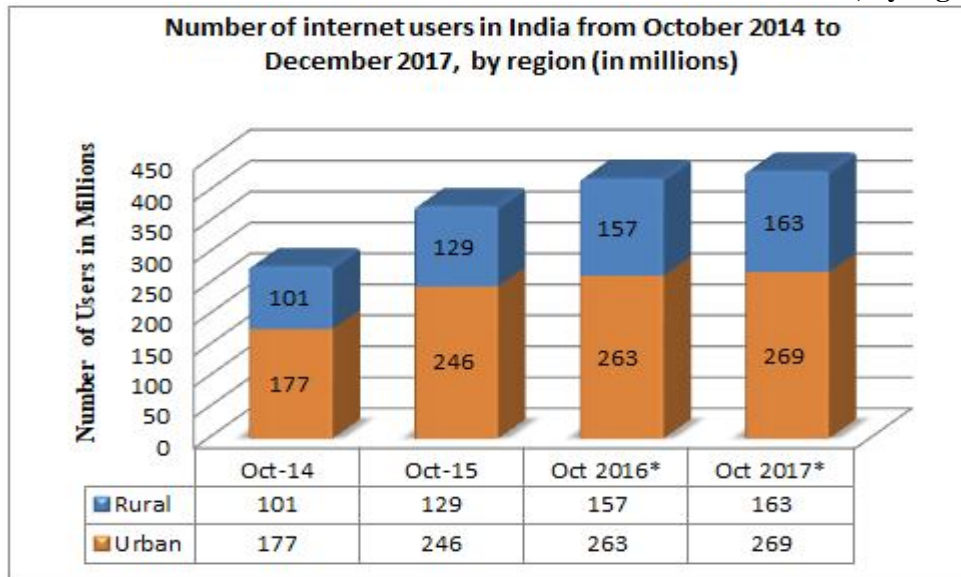
Another significant contributor to the growth of e-commerce in India in the future is the e-tailing industry which largely deals in providing jewelry, apparel and kitchen appliances online. Websites like Flipkart, Myntra, Amazon, Snapdeal, Jabong, etc. are all examples of the enormous success of E-Commerce in India. Due to these firms, India is one of the fastest growing e-commerce markets in Asia/Pacific with China investing as much.

As India has been the heart of the e-commerce market in last few years. India is the fastest growing e-commerce market with the tremendous online retail growth of 53% which is highest comparing to other countries like China -33%, Indonesia -31%, Malaysia -30% and South Korea 30%. (Bain and Company, 2018).





Graph-1: Number of internet users in India from October 2014 to December 2017, by region (in millions)



Source: Statista, March 2017

This statistic illustrates the change in number of internet users in India from October 2014 to December 2017, distributed by region. In December 2017, the number of internet users in urban area was estimated to be around 269 million, while the number was expected to reach 163 million in rural area (Graph 1). It is clear from above graph that number of internet users in rural as well as urban area is increasing.

Graph-2: E-commerce share of total retail sales in India from 2014 to 2019



Source: Statista, December 2015

This statistic shows retail e-commerce sales as a percent of total retail sales in India from 2014 to 2015, and a forecast until 2019. In 2015, e-retail sales accounted for 1.7 percent of all retail sales in India, this figure is expected to reach 4.4 percent in 2019 (Graph 2). It is clear from above Graph that, % of online sale in total sales is increased and expected to increase in near future also.

**VI. KEY ELEMENTS FOR THE GROWTH OF E-COMMERCE BUSINESS IN INDIA**

- Cost of broadband internet facilities plays the pivotal role in this regard as to ensure more people come online.
- Boosting innovative schemes such as the COD (Cash on Delivery) in a country where credit card use is not prominent shows how we have eased into this particular niche. A lot of the major e-commerce websites are based in India and the consistency, and reliability of these sites have shown the people how hassle-free, shopping and availing services are.
- Bringing internet facilities to the rural areas in India as it remains a largely untapped resource and the possibilities are endless for a major boom in the e-commerce industry, only 16% of rural users access the Internet for financial transactions, while in urban areas 44% users access the Internet for this purpose, according to the report (Livemint, 2018)

**VII. CHALLENGES OF E-COMMERCE BUSINESS IN INDIA**

Even if there is a huge opportunity in e-commerce business, there are several particular challenges which are sometimes difficult to handle for any new startup. However, without any doubt, India has been a profitable e-commerce market for the last seven years in a row. Thus many venture capitalists, angel investors, private companies & high-net-worth individuals are investing money in e-commerce, no matter how small or big the business. E-commerce is growing rapidly, but it is still facing several hurdles in operations in India.

- Lack of proper knowledge/ poor market research
- Logistic Challenges
- Cash on delivery
- Changing market trends
- Attracting repeat customers
- Lack of Internet connectivity
- Online security issues

**VIII. CONCLUSION**

If we see E- Business and ecommerce both the terms are distinct from each other. E-business is the broader concept. In India for e- business development there is huge scope and challenges that are focused in this study. The main goal of e-business is to reach the vast segment which is uncovered. There are various types of e-business models such as B to B, B to C etc. mentioned above.

Internet users are tremendously increasing day by day (Graph 1) and it is favorable for the development of e-business in developing country like India. Rural population is also not an exception for this. Rural population is also using Internet and growth is satisfactory. If we see (Graph 2) it clearly shows the scope for e-retailing in India because, percentage of online retail sales in total sales is 5% and increased and expected to increase in near future also. So, there is huge scope for e-retailing in India.

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**STUDY ON ARTIFICIAL INTELLIGENCE IN MARKETING**

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**ABSTRACT**

*Artificial intelligence marketing (AI marketing) is a way of conceptualizing Ai concepts like customer information and Ai concept to expect the next step of your customers and to improve customer travel.*

*Due to the large data evolution and advanced analytical solutions, marketers have previously made a clear picture of their target audience; and this highlight of progress is artificial intelligence (AI) marketing. Armed with large data insights, digital marketers can increase their campaigns' performance and increase the ROI, all of which can be achieved by extra effort at the marketing department. This definition provides an overview at the most basic level of artificial intelligence marketing. We will be addressing all the details of the material in order to follow. Artificial intelligence marketing solutions offer a way to distinguish between data science and implementation. The process of exiting and analyzing the data from the huge dumps was once a wrong process and is not only viable but it is actually easy.*

*Let us consider all the new technologies that have come down in the last few years. We all have also heard of iPhone 7, Google's driverless car, snapchat glasses, and Elon Musk's 'Mars City'. About Marketing-Specific Technology.*

*Keywords: Artificial, marketing, analytical*

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**INTRODUCTION**

Artificial intelligence marketing solutions offer a way to distinguish between data science and implementation. The process of exiting and analyzing the data from the huge dumps was once a wrong process and is not only viable but it is actually easy.

Let us consider all the new technologies that have come down in the last few years. We all have also heard of iPhone 7, Google's driverless car, snapchat glasses, and Elon Musk's 'Mars City'. About Marketing-Specific Technology

**WHAT IS ARTIFICIAL INTELLIGENCE MARKETING?**

Artificial intelligence marketing (AI marketing) is a way of conceptualizing Ai concepts like customer information and Ai concept to expect the next step of your customers and to improve customer travel.

Due to the large data evolution and advanced analytical solutions, marketers have previously made a clear picture of their target audience; And this highlight of progress is artificial intelligence (AI) marketing. Armed with large data insights, digital marketers can increase their campaigns' performance and increase the ROI, all of which can be achieved by extra effort at the marketing department. This definition provides an overview at the most basic level of artificial intelligence marketing. We will be addressing all the details of the material in order to follow.

You've all heard about driverless cars, automated machines, bots, and virtual assistants, even if we do not fully understand the meaning of these terms. These are all self-learning algorithms, Smart technologies like Artificial Intelligence (AI) and Machine Learning (ML). The use of this technology is no longer limited to science-fi films and will not eradicate the research documents. Directed, experienced by data-driven insights through this powerful technology

There has been a gradual change in making traditional decisions by professionals. Let's, from this perspective, do business functions like AI marketing.

How is AI changing marketing?

Today we have retail, online, social, mobile, flash sales etc. Previous marketing channels are already there. Marketing decision must be fast and out-of-the-box. So far, all the focus and enthusiasm about how ML or AI can help marketers better connect with their customers. There is not much discussion about how their consolidation in all the aspects of large data, digitization and AI's inventions and marketing will change the basic rules of marketing. To understand, High reliance on analysis has been done to remove insight and to develop customer-connected strategies and measure the effectiveness of various marketing actions. However, ML and AI are upgrading games by automating all the functions to unlock the functionality at a high level.

Deep learning and AI can work more like human brain, so they can also work in the creative aspects of marketing.

### **A STUDY ON ROLE OF ARTIFICIAL INTELLIGENCE MARKETING**

Artificial intelligence marketing solutions offer ways to bridge the gap between data science and execution. The process of sifting through and analyzing huge dumps of data was once an insurmountable process and is now not only feasible but it's actually easy.

Let's think about all of the new technologies that have hit the market in the past year or so. We've all heard about the iPhone 7, Google's driverless cars, Snapchat Glasses, and even Elon Musk's 'city on Mars'. What about marketing-specific technologies though? Artificial intelligence marketing solutions offer a way to distinguish between data science and implementation. The process of exiting and analyzing the data from the huge dumps was once a wrong process and is not only viable but it is actually easy Let us consider all the new technologies that have come down in the last few years. We all have also heard of iPhone 7, Google's driverial car, snapchat glasses, and Ellon Musk's 'Mars City'. What about marketing-specific technology?

### **WHAT IS ARTIFICIAL INTELLIGENCE MARKETING?**

Artificial intelligence marketing (AI marketing) is a way of conceptualizing Ai concepts like customer information and Ai concept to expect the next step of your customers and to improve customer travel.

Due to the large data evolution and advanced analytical solutions, marketers have previously made a clear picture of their target audience; And this highlight of progress is artificial intelligence (AI) marketing.

Armed with large data insights, digital marketers can increase their campaigns' performance and increase the ROI, all of which can be achieved by extra effort at the marketing department. This definition provides an overview at the most basic level of artificial intelligence marketing. We will be addressing all the details of the material in order to follow.

You've all heard about driverless cars, automated machines, bots, and virtual assistants, even if we do not fully understand the meaning of these terms. These are all self-learning algorithms, Smart technologies like Artificial Intelligence (AI) and Machine Learning (ML). The use of this technology is no longer limited to science-fi films and will not eradicate the research documents. Directed, experienced by data-driven insights through this powerful technology There has been a gradual change in making traditional decisions by professionals. Let's, from this point of view, enter business activities like AI marketing.

### **HOW IS AI CHANGING MARKETING?**

Today we have retail, online, social, mobile, flash sales etc. Previous marketing channels are already there. Marketing decision must be fast and out-of-the-box. So far, all the focus and enthusiasm about how ML or AI can help marketers better connect with their customers. There is not much discussion about how their consolidation in all the aspects of large data, digitization and AI's inventions and marketing will change the basic rules of marketing.

To understand, to remove insights and to develop customer-linked strategies and to measure the impact of various marketing actions, there has been a high degree of reliance on the analysis. However, ML and AI are upgrading games by automating all the functions to unlock the functionality at a high level. Deep learning and AI can work more like human brain, so they can also work in the creative aspects of marketing.

### **CORE ELEMENTS OF ARTIFICIAL INTELLIGENCE MARKETING**

There are some important elements that AI marketing is so powerful that today includes bid data, machine learning and the right solutions.

#### **BIG DATA**

Big data is a straightforward concept. This is the marketer's ability to collect and split large data with minimal manual work. Marketing team can then use this data for the purpose of delivering the right message to the right person through the appropriate route. **Machine Learning**

Machine learning platforms come in handy when marketers try to make sense of this huge data repository. They can help identify trends or common occurrences and effectively predict common insights, responses, and reactions so marketers can understand the root cause and likelihood of certain actions repeating.

#### **POWERFUL SOLUTIONS**

Artificial intelligence marketing solutions really can make the world understand like humans. This means that the platforms can unknowingly detect underlying concepts and themes on a fast data set. AI Solutions also

speaks emotions and interactions like human, so that platforms are able to understand the free form content, such as social media, natural language and email responses

### **CORE BENEFITS OF ARTIFICIAL INTELLIGENCE MARKETING**

So what does this mean for marketing associations? AI is getting more insights into marketing marketers because of the underlying insights. According to the recent PwC study, 72% see AI as "business profit".

Let's review some of the ways retailers might expect to influence AI in the coming months and over the years:

### **MORE INTELLIGENT SEARCHES**

Advanced technology solutions are intelligent so it is important to remember that the audience is also clever. Thanks to social media and rapid-fire search engines (thanks Google!), People who are looking for what they are looking for faster than before. AI and Big Data Solutions can actually analyze this search model and help marketers identify their main areas they should focus on.

### **SMARTER ADS**

Market-based marketing solutions, marketers are already putting their nipples in good smart advertisements, but AI really helps in furthering this layer for insightful analysis. With new data available, online advertising can be intelligent and more effective. AI Solutions can deepen in keyword search, social profiles and other online data for human-level results.

### **REFINED CONTENT DELIVERY**

With AI, marketers can take data and aim at a whole new level. To understand people individually, audience analytics can go back to a certain demographic level. Now, marketers can use AI to identify potential customers or buyers and deliver the ideal content that is most fitting for them. With a great deal of data, machine learning and AI combined, a few knowledgeable marketers can not achieve.

### **RELYING ON BOTS**

Customer service and retention is the second place where AI will play a big role in the future. Soon, chat functions and other direct-to-customer engagement paths will be run by AI Bot. Many companies can save employees time and expenses with this technology. AI Bots have access to complete internet data, information and search history, making them more efficient than their human counterparts.

### **CONTINUED LEARNING**

AI cannot be used to open hidden insights only once, can actually be taught and new campaigns can learn to incorporate insights previously not disclosed, to optimize outreach to target only the most relevant users. Over time, AI Solutions will become even more intelligent, the waste will be effectively destroyed effectively, large scale conversion will increase and encourage real-time decisions.

### **NEED OF THE STUDY**

- 1) As the concept is new to the world and yet no penetrate full so need to understand and evaluate by the marketing department and the marketing and sales peoples.
- 2) To understand the benefits of the artificial intelligence and customer behavior.

### **OBJECTIVES**

- 1) To study the various aspects of Artificial Intelligence.
- 2) To find out the impact of Artificial Intelligence on marketing.
- 3) To study the future of Artificial Intelligence.

### **RESEARCH METHODOLOGY**

In this research, qualitative research methods and case studies will be used to better understand the impact of marketing and sales revolution and the impact of AI on the revolution.

Ratio research is used because AI is a new phenomenon, and qualitative research enables you to understand deeply about behavior and enable researchers to better interact with the interview. Artificial Intelligence is the Future of Marketing Qualitative research provides the opportunity to examine the existing theoretical and theoretical foot that does not apply in age AI. Multiple hair studies will be conducted in various organizations and in various marketing and sales units. We will interview with vendors and sales staff as well as their managers and officials. The feature sample will be used.

**1. Take Sales Forecasting to the Next Level**

AI takes the Conversion Management solution at the next level. Sellers can now compare sophisticated inbound communication versus traditional metrics to help answer tough strategies. Because of AI marketing, there are no questions about whether a potential customer is ready to talk, the data is answered.

**2. Gain a Deeper Understanding of Your Consumers**

With AI solutions, retailers know exactly what customers are thinking, thinking and thinking about the brand in real time. Similarly, available social media trauma (and for analysis of AII), customers can really understand what they feel. Lenders can actually use this data in marketers, and can then quickly improve messaging or branding for maximum effectiveness.

**3. Optimize Digital Advertising Campaigns**

There are many ways to optimize digital advertising and account-based marketing, AI Solutions helps them take a further step in the deep insight and analysis of the market. For smart and most effective digital advertising, AI can tap huge amount of hidden customer data in keyword search, social profile, and other online data. The results are human-level impacts and insights without human-level work force.

**4. Create Detailed Consumer Profiles**

This huge amount of data can also help in feeding consumer profiles. AI Solutions will enable marketers to deliver the right message to the right person at the right time, with deep knowledge of customers and potential customers. The secret to creating a truly comprehensive profile is to capture data between each customer interface. Marketers can use AI Solutions to take this step forward, improve marketing campaign and create highly personalized content.

**5. Join Real-Time Conversations with Consumers**

One of the key points of AI is the ability to analyze large blocks of open material and the ability to identify trends. This allows brands to interact directly with online conversations or programs in real conversations. Communicating with customers at 'the time of decision' helps directly influence purchasing purchases. AI helps keep an eye on these social conversations and other free platforms to identify any related conversations.

**FINAL THOUGHTS**

Marketers do not have a better time to test how artificial intelligence policies can help to create a very personalized experience for our customers. AI has begun to grow in all industries and segments, marketers should devote time and resources to experimentation using policies and make sure their marketing organization is now and ready for success, success in success.

Artificial intelligence (AI) has got a long way from its inception. Due to the increase in AI-powered marketing, many marketers have to bear the burden and get support from the machine, so that they are given more time to market their marketing efforts and to meet the challenges of marketers facing their challenges.

As you have started teaching the machine how to understand humans, AI is learning and developing, as well as the ability to marketers to develop a very insightful campaign.

**CUSTOMER SEGMENTATION**

In today's digital market, customers have developed high expectations for a more personalized experience. Vendors must be at risk of taking up their games, improving interaction, and delivering new needs and desires or losing the lead to the competition.

Marketers must deliver the right message, the right message at the right time - and they can complete this with a customer partition. AI Technologies enables marketers to distinguish their customers into individual individuals and to understand what motivates them. Considering this information, marketers can focus on the specific needs of their audience and can create long-standing relationships with the brand.

**ACCURACY**

Consumers spend countless hours trying to get some insights into their target audience, because they know that customer insights are the head of more strategic marketing campaigns.

Previously, the availability of quality data was reduced and fueled by demographic. Now, we are entering an era of strong AI Data Analytics which lets the marketers open their doors to fully understand the deep level.

That is, as with most things in life, AI 100 percent is not silly. However, AI Budget Analysis aims to make the most accurate estimate by analyzing recent and current customer behavior patterns. Using collected data, marketers can incorporate insights into their marketing efforts to create optimized and targeted campaigns.

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Working with agencies like Ayzenberg, for example, enables the marketers to tap into AI's strengths to gain intense insights. Eisenberg is an agency that is run by data. They understand that in this technological age, data takes us, and customers should always use the correct insight to ensure that customers always stay at the top of changing needs and desires.

### **STREAMLINE MARKETING EFFORTS**

Every marketer understands that effective marketing is an ongoing trend. Since customer's needs and expectations are changing constantly, it is difficult for any experienced marketman to remain in the loop of current insight.

However, AI-powered technology is set up for marketing revolution by presenting vendors with high quality data through the use of intensive education.

Intensive education is any human Operators do not have to command or analyze outputs and work on trial-and-error basis. These algorithms are capable of imitating human brain activity and getting detailed information. Therefore, marketers are capable of developing, analyzing, analyzing, and using intensive education to speed up their time for developing smart campaigns and to save time for more demanding tasks.

### **IMPROVED CUSTOMER INTERACTIONS**

As mentioned earlier, the demand for personalized services has increased and the customers who do not meet the expectations will decrease - because everyone knows that the satisfied customer will not be able to return.

One of the best ways to customize and deliver great customer service is to invest in AI Chatbot. These virtual assistants can help build strong relationships and interactions with customers in a robust, efficient and consistent way. They use AI to track and predict user behavior, and with this information, they can implement strong customers and personalize customer interaction to make each client's journey unique to them.

Intelligent conversation chatbutt can handle problems quickly and quickly as they arrive. Intelligent conversation chatbutt can handle problems quickly and quickly as they arrive. Just like humans, chatbots work firmly and when customer problems improve. See this list of chatbots that you are revolutionary in business

### **SO WHAT SHOULD YOU TAKE OUT OF THIS?**

When marketers choose to implement AI, they know that we know artificial intelligence technology and are re-marketing to market as they are affecting various aspects of the business.

Since this technology is constantly evolving and expanding, AI must have a top priority for the businesses that are looking to succeed in competitive markets. People who refuse to do so will be left behind

### **CONCLUSION**

AI is undoubtedly revolutionary in marketing and sales. As a leading effort to understand the impact of Ai in the field, the results of this research will inform the learners about the changes in the AIA affected organization. We will be able to study the impact of AI on research and marketing staff because their job has been uninstalled and AI has taken its place.

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**CONSUMER BEHAVIOR AND PERCEPTION REGARDING LAKME COSMETICS: WITH SPECIAL REFERENCE TO WOMEN**

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**ABSTRACT**

*Cosmetics are one of the most demanding products amongst FMCG product ,These are lables which cant be ignored by companies as its treds never fade though people are more keen to make and look beautiful as compared to previous year .Here in research paper we would like to concentrate and focus on female consumers of cosmetics and their behaviour towards various changes registered in market trends with respect to the Lakme products. Finding says Lakme is still a market leader in cosmetics though need improvement in few areas of working .*

*Keywords: consumer behaviour, Lakme, Female consumers*

**INTRODUCTION TO CONSUMER BEHAVIOUR**

**Consumer Behaviour**

Customer behaviour study is based on consumer buying behaviour, with the customer playing the three distinct roles of user, payer and buyer. Relationship marketing is an influential asset for customer behaviour analysis as it has a keen interest in the re-discovery of the true meaning of marketing through the re-affirmation of the importance of the customer or buyer. A greater importance is also placed on consumer retention, customer relationship management, personalisation, customisation and one-to-one marketing. Social functions can be categorized into social choice and welfare functions.

Belch and Belch define consumer behaviour as 'the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires'.

**• BLACK BOX MODEL**

Marketing Stimuli	Environmental Stimuli	Buyer characteristics	Decision problem	Buyer response
Product	Economic	attitudes	Problem recognition	Product choice
Price Place	technological	motivation	Information search Alternative evaluation	Brand choice
	Political	perceptions		Dealer choice
	Cultural	personality		Purchahse timing
Promotion	demographic	lifestyle	Purchase decision	Purchase amount

The black box model shows the interaction of stimuli, consumer characteristics, decision process and consumer responses. It can be distinguished between interpersonal stimuli (between people) or intrapersonal stimuli (within people). The black box model is related to the black box theory of behaviourism, where the focus is not set on the processes inside a consumer, but the relation between the stimuli and the response of the consumer. The marketing stimuli are planned and processed by the companies, whereas the environmental stimulus are given by social factors, based on the economical, political and cultural circumstances of a society. The buyers black box contains the buyer characteristics and the decision process, which determines the buyers response.

**REVIEW OF LITERATURE**

When consumers perceive an advertisement for a certain brand as promoting another, it is not only ineffective, but even counterproductive (Kamen, 1987; Poesz and Verhallen, 1989): it produces an effect that the advertiser specially wants to avoid.

Therefore, perception, although seldomly studied, is a phenomenon that has an impact over its consumers, and researchers. unremitting attention, and measures of consumer behavior and perception should be added to the more conventional measures to increase the sales of a product(Poesz and Verhallen, 1989).

Consumer behavior is studied so that we can come to know that how perception and attitude of a person decides that what should be the buying pattern of the consumers (Poesz and Verhallen, 1989).



*A. Sengupta and Noopur Agrawal*

Not only the consumer behavior but the perception of consumers, may be the subject of people buying the products of lakme (Poiesz and Verhallen, 1989).

Correct identification and confusion are not perfectly related. It is possible that the recipient of the message cannot attribute any particular brand to an advertising message, in which case he/she is not really confused, but simply does not have any idea.

Brengman et al. (2001) found that Consumers most vulnerable to brand perception generally have higher level of knowledge about the products which they are using.

Products are becoming more and more objectively similar with respect to their functionality and product presentation (Poiesz and Verhallen, 1989). Ha (1996) refers to the degree of similarity and proximity of advertisements. (De Pelsmacker and Geuens, 1997a).the more the proximity the more consumers are prone to buy the products.

Successful advertising techniques get imitated and waves of similar advertising arise. It can be expected that a higher DOSS leads to more brand confusion. In parallel, similarity in visual appearance of products has also been found to be a major reason for confusion in advertising (Loken and Ross, 1986; Ward and Loken, 1986).

Furthermore, in a study of brand perception of consumers cited the product or the packaging. as a primary reason for recognition and buying of the product. (De Pelsmacker and Van Den Bergh, 1997b).

#### ❖ INTRODUCTION TO COSMETICS INDUSTRY IN INDIA

India, with a population of nearly a billion people, is a country of contrasts. India's urban population is the main engine that fuels the demand for various cosmetic products. The 'morphing' of India is subtle and the changes are not visible for the first time visitor. However, the market liberalization process that began in 1991, along with the crowning of three Indians as Miss World and Miss Universe during the preceding four years, have made Indian women conscious of their appearance. Consequently, the cosmetic consumption patterns of Indian women have changed, and this trend is fuelling growth in the cosmetic sector. The Indian cosmetics and toiletries market grew by 8.7% in current value terms in 2001, with value sales amounting to Rs126 billion.

#### **Market Overview**

The current size of the Indian cosmetic market is approximately US\$ 800 million. Of this, the fastest growing segment is color cosmetics, accounting for around US\$ 80 million of the market.

#### **Competition**

A consumer confusing brands thinks he/she recognises the brand. Depending upon what is the perception of the consumers, it can be positive or negative. (Häcker and Verhallen, 1988; Poiesz and Verhallen, 1989). Negative perception refers to the extent to which the respondents will not buy the product. Positive brand perception refers to the degree to which the other respondents are willing to buy the product. Positive Brand perception is an advantage for a brand. Negative brand perception may be a threat to a clear positioning of the product amongst the women.

The Indian cosmetic market, which has been traditionally a stronghold of a few major Indian players like Lakme, and Ponds has seen a lot of foreign entrants to the market within the last decade. India is a very price sensitive market and the cosmetics and personal care product companies, especially the new entrants have had to work out new innovative strategies to suit Indian preferences and budgets to establish a hold on the market and establish a niche market for themselves. HUL, is currently India's largest cosmetics and personal care products producer and its brands has the dominant share (more than 50 percent) in segments such as personal wash, skin care, shampoos, lipsticks and nail polish.

#### **INTRODUCTION OF LAKME UNILEVER PRIVATE LTD**

"Lakme is the Indian woman's Beauty Sutra" – inspiring expression of her unique beauty and sensuality.Lakme brings expert products and services that are borne out of true understanding of the needs of the Indian woman.

#### **Key facts**

Lakme was the first major beauty brand in India and takes pride in being the expert on Indian Beauty for over 50 years. It is complete beauty brand spanning colour cosmetics, skin care & hair styling products and extending to beauty services through the network of Lakme Beauty Salons. Its bond with beauty and fashion is manifested through the Lakme Fashion Week, which is now the largest fashion event of its kind in the country.

Lakme has a foot print of over 1200 assisted sales outlets, which is the largest span of outlets with “Beauty Advisors” in the country.

• **LAKME’S POSITIONING IN TERMS OF PERSONALITY AND SELF CONCEPT:**

Lakme is a product range that caters to the beautification needs of not only women in their adult age but in today's context teenagers also. It has a brand personality of someone who takes care of you and your beauty needs. It tries to position itself amongst its consumers as a product range that will help them look beautiful as is evident from its catchphrases:

1. On top of the world!
2. Source of radiant beauty1!

**Lakme has a range of beauty products to offer to its consumers. Some of the ways in which it tries to position itself:**

1. Lakme Hair Color: magic of colors (collage).
2. Lakme (versatile eye shadow collection): rich, long lasting and healthy make up.
3. Lakme fair perfect: For flawlessly fair skin!
4. Lakme face magic: daily wear soufflé.
5. Lakme (skin vitalizer): radiant skin, now and forever.
6. Lakme (moisturizer): radiant skin, now and forever.
7. Lakme nail polish and lipstick: electric brilliance/sensual brilliance
8. Lakme sun expert (sunscreen): sun safe hamesha! (face the sun with a smile)
9. Lakme pure defense: anti-pollution system.
10. Lakme Tropical Island (cosmetics): defining the future of fashion.
11. Lakme hair care (international): natural hair care
12. Lakme hair next: exclusive range of hairstyle products that give you that salon look instantly.

**The following factors of Lakme's personality help in differentiation of its products from the competition**

- It covers all facets of beauty care.
- It helps arm the consumer with products to pamper her from head to toe i.e. a complete product range.

**OBJECTIVE OF STUDY**

- To know what is the awareness level of the customers about cosmetics and also the various perceptions they have about the products.
- To study the level of customer awareness towards the brand LAKME.
- To know how women perceive the various categories of LAKME products

**RESEARCH METHODOLOGY**

**SOURCES OF DATA**

**Primary Source of Data**

Primary data are those collected by the investigator himself for the first time and thus they are original in character, they are collected for a particular purpose from various areas of mumbai. A wellstructured questionnaire was personally administrated to the selected sample to collect the primary data.

**Secondary Source of Data**

Secondary data are those, which have already been collected by some other persons for their purpose and published. Secondary data are usually in the shape of finished products. External Data, was generated from magazines, research books and internet (websites).

**RESEARCH DESIGN**

The study was conducted as an exploratory sampling survey method to collect primary and secondary data.

**SAMPLING DESIGN**

A sample is a representative part of the population. In sampling technique, information is collected only from a representative part of the universe and the conclusions are drawn on that basis for the entire universe.

**Sampling Technique:** A random sampling technique was used to collect data from the respondents.

**SAMPLE SIZE** Sample size denotes the number of elements selected for the study. For the present study, 100 respondents were selected at random. All the 100 respondents were the customers of one or another cosmetic industry. Out of these 100 respondents 60 were specifically Lakme customers.

**SAMPLE DESCRIPTION:** The respondents was 100 cosmetics users of different cosmetics companies in general, out of which 60 respondents were the users of Lakme in particular; as the paper was focused on the consumer behavior and perception of users towards the cosmetic products with special reference to Lakme.. Most of the respondents were in age group of 18-20; which was having a frequency of 68, 14 respondents were in the age group of 21-24, 10 respondents were in the age group of 24-29 and 8 respondents were more than 30 years. According to gender wise, all were female respondents. Nearly half of the respondents were students and a big chunk of the rest was employed women.

**HYPOTHESIS:**

Ho: consumers are satisfied.

Ha: consumers are not satisfied.

**LIMITATION OF STUDY**

1. An underlying assumption for the entire paper is that the details and the feedback received from the population is true.
2. It was difficult to find respondents as they were busy in their schedule, and collection of data was very difficult. Therefore, the study had to be carried out based on the availability of respondents.
3. Some of the respondents were not ready to fill the questionnaires and some of them were not ready to come out openly.
- 4 .The results can not be considered most accurate as it is dealing with the many more other constraints like geographical area , budget etc.

**DATA ANALYSIS AND INTERPRETATION**

**TEST OF HYPOTHESIS**

Whether the consumers are satisfied with cosmetic products and services of Lakme company.

<b>CUSTOMER SATISFACTION</b>	<b>COSMETIC PRODUCTS</b>	<b>SERVICES</b>	<b>TOTAL</b>
SATISFIED	53	48	101
DISSATISFIED	7	12	19
TOTAL	60	60	120

**HYPOTHESIS**

Ho: consumers are satisfied.

Ha: consumers are not satisfied.

Level of significance: 5%

Degree of freedom ( DOF): (R-1) (C-1) = (2-1) (2-1) = 1

Tab=7.88

Test of statistics- (O-E)\*2/E

<b>OBSERVED VALUE (O)</b>	<b>EXPECTED VALUE (E)</b>	<b>(O-E)*2</b>	<b>(O-E)*2/E</b>
53	50.5	5	0.099
7	9.5	-5	0.526
48	50.5	-5	0.099
12	9.5	5	0.526
TOTAL			1.25

Cal = 1.25

Tab = 7.88

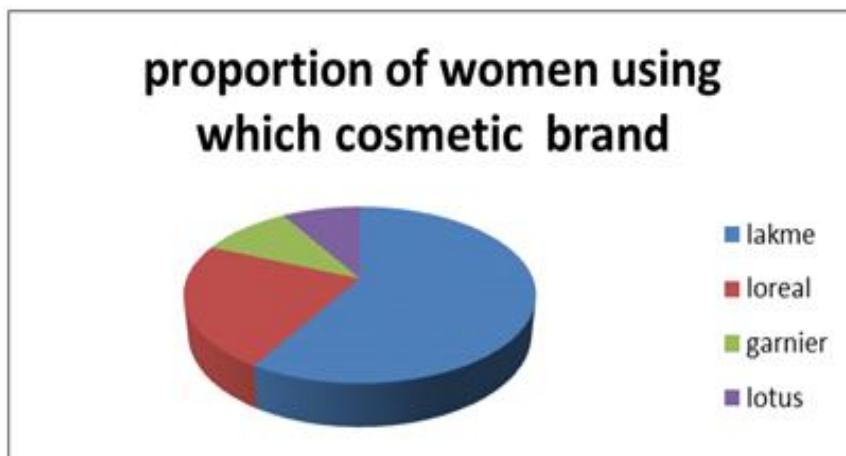
**Conclusion and Interpretation**

Since, the calculated value ( $\chi^2_{cal}$ ) is lesser than tabulated value ( $\chi^2_{tab}$ ), null hypothesis ( $H_0$ ) is accepted, i.e. alternate hypothesis ( $H_a$ ) is rejected. It means consumers are satisfied products and services of LAKME.

**1. Which company’s cosmetics are you using?**

Table showing that cosmetics of which company are most used.

PARTICULARS	FREQUENCY	PERCENTAGE
LOREAL	20	20%
LAKME	60	60%
GARNIER	15	15%
LOTUS	05	5%



From the above table it can be inferred that

- ✓ Out of the 100% population only 20% ladies are using loreal.
- ✓ Out of 100% of population only 60% of ladies are using Lakme.
- ✓ Out of 100% of population only 15% of the ladies are using garnier.
- ✓ Out of 100% of population only 5% of the ladies are using lotus.

**2. Which product are you using most often in a month?**

Table showing that which product is being used most often in a month.

PARTICULARS	FREQUENCY	PERCENTAGE
HAIR CARE PRODUCTS	12	12%
SKIN CARE PRODUCTS	20	20%
BODY CARE PRODUCTS	10	10%
MAKE UP	58	58%



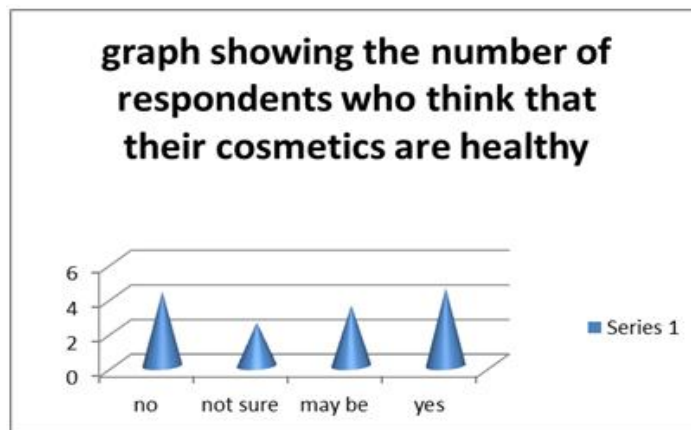
From the following table these points can be inferred

- ✓ 12% of the women use hair products on monthly basis.
- ✓ 20% of the women use skin care products on the monthly basis.
- ✓ 10 % of the women use body care products.
- ✓ 58% of the women of the women use make up products.

**3. Do you think that your product provides you with an option of healthy and long lasting harmless?**

Table showing the number of people who think that think that their product provides them with an option of healthy and long lasting harmless Makeup

particulars	Frequency	PERCENTAGE
Yes	58	58%
No	20	20%
May be	17	17%
Not sure	5	5%



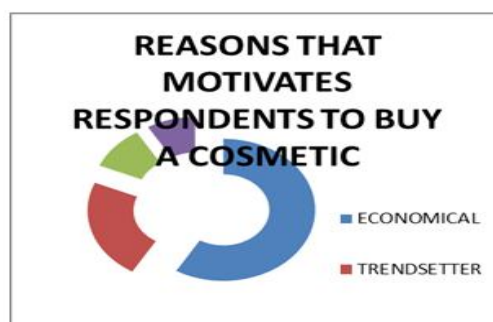
From the following table we can infer

- ✓ 58% of the people trust their brand when it comes to healthy makeup.
- ✓ 20% of the people do not trust their brand when it comes to healthy makeup, but because results use it.
- ✓ 17% of the people think that not all of the products of their brand is healthy.
- ✓ 5% of the people are not at all sure of the healthiness of their products.

**4. What is the reason that motivates you to use the products of a particular company?**

Table showing the reasons that motivates the respondents to buy particular product.

PARTICULARS	FREQUENCY	PERCENTAGE
ECONOMICAL	35	35%
TRENDSETTER	20	20%
MEASURABLE RESULTS	28	28%
EASILY AVAILABLE	17	17%



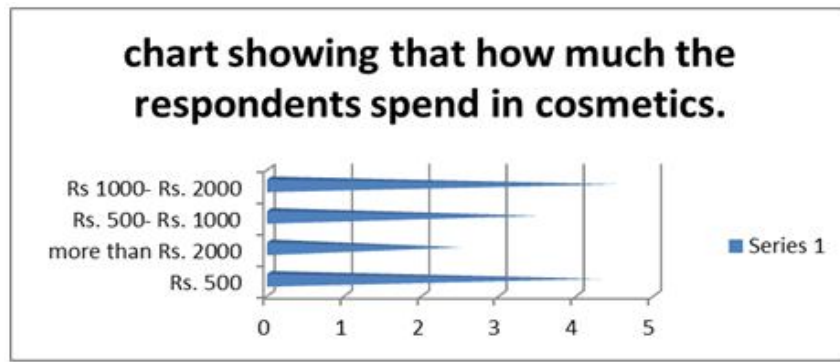
**From the following table we can infer that**

- ✓ 35 respondents out of 100 respondents find their cosmetics to be economical.
- ✓ 20 respondents out of 100 respondents find their cosmetics to be trend setter.
- ✓ 28 respondents out of 100 respondents find their cosmetics to show measurable results.
- ✓ 17 respondents out of 100 respondents find their cosmetics to be easily available.

**5. Approximately how much do you spend in the buying of cosmetics?**

Table showing that how much the respondents invest in the buying of cosmetics.

<b>PARTICULARS</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>Below Rs. 500</b>	68	68%
<b>Rs. 500 – Rs. 1000</b>	12	12%
<b>Rs. 1000- Rs. 2000</b>	14	14%
<b>Rs. 2000 and above</b>	6	6%



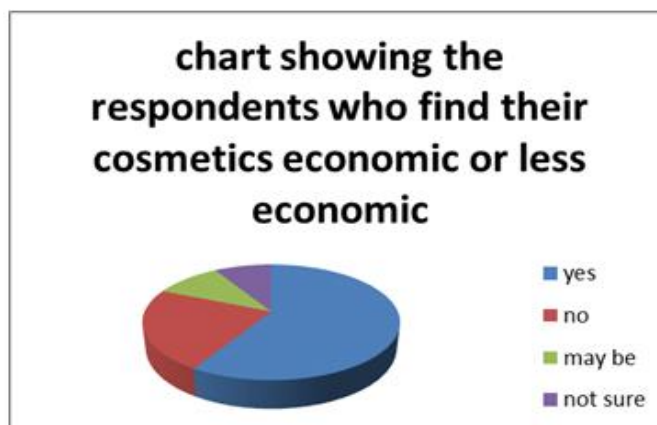
**From the following table we can infer the following points**

- ✓ 68 respondents out of 100 respondents spend below Rs . 500 in cosmetics.
- ✓ 12 respondents out of 100 respondents spend Rs. 500- Rs. 1000 in cosmetics.
- ✓ 14 respondents out of 100 respondents spend Rs. 1000 – Rs. 2000 in cosmetics.
- ✓ 6 respondents out of 100 respondents spend more than Rs. 2000 in cosmetics.

**6. Do you find your cosmetic products economical?**

Table showing that how many respondents find their cosmetics to be economical.

<b>PARTICULARS</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>YES</b>	49	
<b>NO</b>	30	30%
<b>MAY BE</b>	11	11%
<b>NOT SURE</b>	10	10%



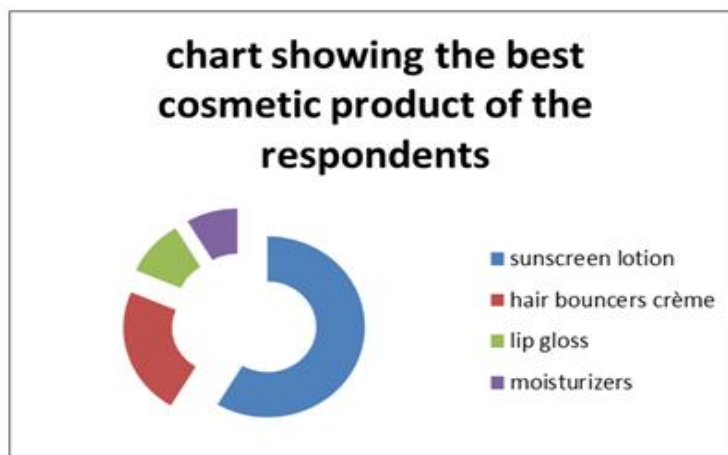
From the following table we can infer that

- ✓ 49 respondents out of 100 respondents believe that their cosmetics are economical.
- ✓ 30 respondents out of 100 respondents believe that their cosmetics are not economical.
- ✓ 11 respondents out of 100 respondents say that not all the products are economical.
- ✓ 10 respondents out of 100 respondents are not at all sure of economic reliability of their cosmetics.

7. If you are being asked to choose amongst one of the best product that you use, what would that be?

Table showing the best cosmetic product of the respondents of their brand .

PARTICULARS	FREQUENCY	PERCENTAGE
SUNSCREEN LOTION	59	59%
HAIR BOUNCERS CREME	15	15%
MOISTURIZERS	9	9%
LIP GLOSS	17	17%



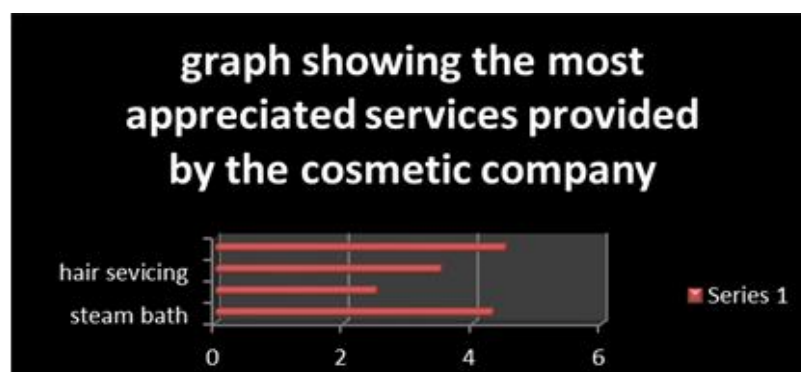
From the following table we can infer that

- ✓ 59 respondents out of 100 respondents found sunscreen lotion to be the best product.
- ✓ 15 respondents out of 100 respondents found hair bouncers crème to be the best product.
- ✓ 9 respondents out of 100 respondents found moisturizers to be the best product.
- ✓ 17 respondents out of 100 respondents found lip gloss to be the best product.

8. What services of your favourite company you appreciate the most?

Table showing the most appreciated service provided by their favourite company.

PARTICULARS	FREQUENCY	PERCENTAGE
STEAM BATH	32	32%
MANICURE / PEDICURE	14	14%
FACIAL/ MASSAGE	44	44%
HAIR SERVICES( rebounding etc)	20	20%



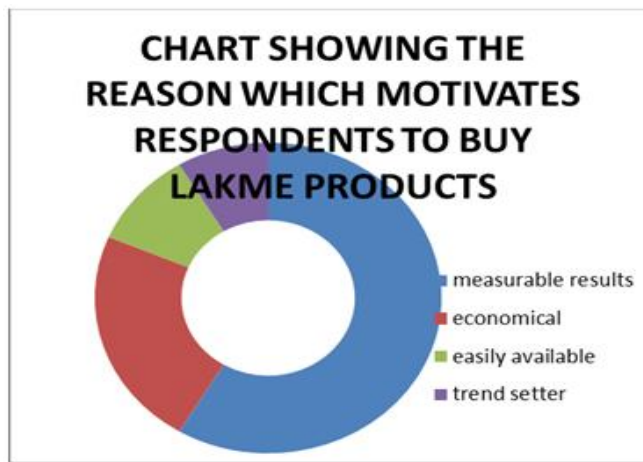
From the table you infer the following points

- ✓ 32 respondents out of 100 respondents like steam bath service.
- ✓ 14 respondents out of 100 respondents like manicure/pedicure.
- ✓ 44 respondents out of 100 respondents like facial/ massage.
- ✓ 20 respondents out of 100 respondents like hair services.

**1. What motivates you to buy lakme products?**

Table showing the reasons which motivates the respondents to buy lakme products

PARTICULARS	FREQUENCY	PERCENTAGE
MEASURABLE RESULTS	20	33.33%
ECONOMICAL	18	30%
EASILY AVAILABLE	12	20%
TREND SETTER	10	16.66%



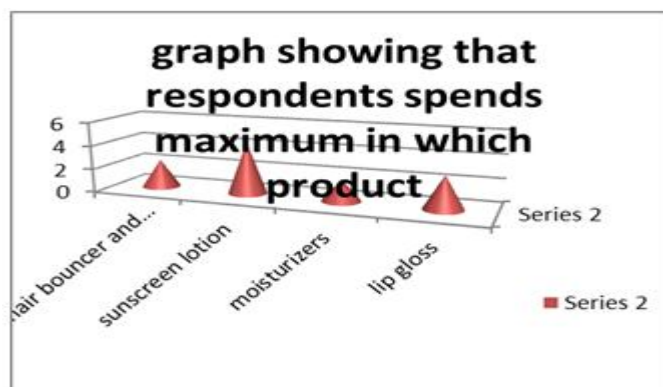
From the following table it can be inferred that

- ✓ 20 respondents out of total 60 lakme respondents use lakme products for the measurable results.
- ✓ 18 respondents out of 60 lakme respondents use its products as they are economical.
- ✓ 12 respondents out of 60 lakme respondents use its products as they are easily available.
- ✓ 10 respondents out of 60 lakme respondents use its products as they are trend setters.

**10. In which cosmetics of lakme do you invest your money more?**

Table showing the lakme cosmetic in which the maximum investment is done by respondents.

PARTICULARS	FREQUENCY	PERCENTAGE
SUNSCREEN LOTION	34	56.66%
HAIR BOUNCERS CREME	9	15%
MOISTURIZERS	5	8.33%
LIP GLOSS	12	20%





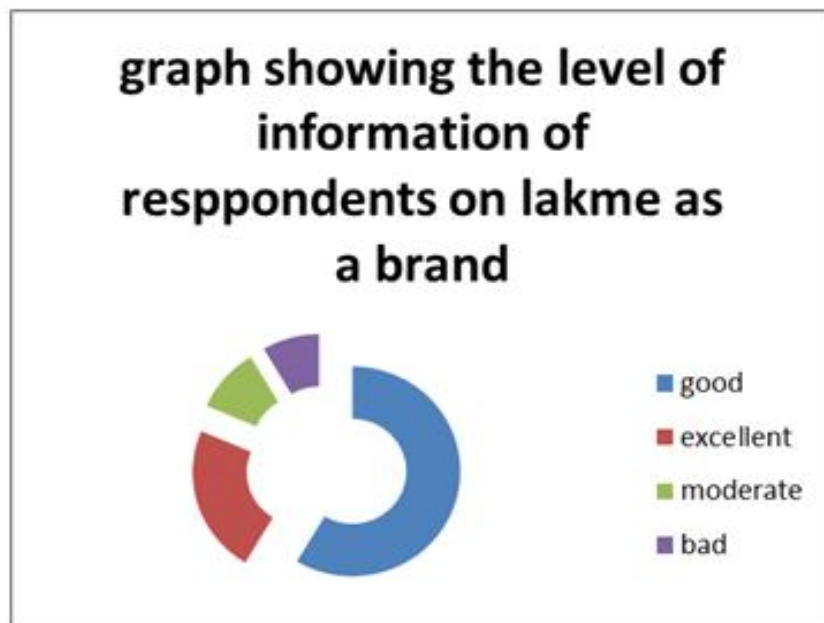
**From the following table we can infer that**

- ✓ 34 respondents out of the total 60 lakme respondents spend maximum money in sunscreen lotion.
- ✓ 9 respondents out of the total 60 respondents spend maximum money in hair bouncers crème.
- ✓ 5 respondents out of the total 60 lakme respondents spend maximum money in moisturizers.
- ✓ 12 respondents out of the total 60 respondents spend their maximum money in lip gloss.

**11. What is your level of information on Lakme as a brand?**

Table showing the level of information of respondents on Lakme as a brand.

PARTICULARS	FREQUENCY	PARTICULARS
EXCELLENT	14	23.33%
GOOD	28	46.66%
MODERATE	10	16.66%
BAD	8	13.33%



**From the following table we can infer that**

- ✓ 14 respondents out of 60 lakme respondents had excellent knowledge about lakme as a brand.
- ✓ 28 respondents out of 60 lakme respondents had good knowledge about lakme as a brand.
- ✓ 10 respondents out of 60 lakme respondents had moderate knowledge about lakme as a brand.
- ✓ 8 respondents out of total 60 respondents had bad knowledge about lakme as a brand.

**CONCLUSION, FINDINGS AND SUGGESTIONS**

**Findings**

1. Lakme is the clear market leader across all age groups and income levels.
2. Majority of the respondents ie. 60 respondents out of total 100 respondents are using lakme products. With Loreal in the second number having 20 regular customers of it. 15 respondents rae using Garnier and only 5 are using Lotus cosmetics. This shows that lakme has more number of women using it.
3. The dissertation shows that maximum number of the respondents are using make up products of their brand like mascara, eyeliner, foundation, facepowder, blushers etc. next the eopleare investing maximum in skin care products.
4. 58 respondents trust their brand of cosmetics when it comes to healthy make up. 20 respondents do not find their cosmetics to be healthy in the sence that the brand uses more of chemicals in its compositions.
5. 35 respondents use their cosmetic products because they are economical in nature, while a major portion of the bulk buys the products of a brand because they show measurable results.

6. 68 respondents spend below Rs. 500 on their cosmetics. However there are many people ie 14 who spend Rs. 1000- Rs. 2000 in cosmetics.
7. 49 respondents out of 100 respondents find their cosmetic brand to be economical in nature.
8. 59 respondents out of total of 100 respondents find sunscreen lotion to be the best product of their cosmetic brand. While 17 out of them find lip gloss to be the best part of its brand.
9. 44 people appreciate the facial and massage services provided by their favourite cosmetic company. 32 out of 100 users find steam bath to be very appreciative.
10. 20 respondents out of 60 users who use only lakme products, use lakme products because they show measurable results. While 18 out of 60 uses it because lakme is very economical in nature.
11. 34 respondents out of 60 users of lakme products use the sunscreen lotion the maximum times, the next product being lip gloss.
12. 28 respondents have a very good knowledge about lakme as a brand.
13. 20 respondents out of 60 respondents use lakme's makeup products, while 17 respondents use lakme products of skin protection.
14. 28 respondents found lakme to be good, 18 found it to be an excellent product, 14 respondents , moderately like the products of lakme.
15. 48 respondents are satisfied with the services provided by LAKME.
16. 53 respondents are satisfied with the products of lakme.

**Suggestions**

1. Affordable cosmetic products must be launched, drawing less than 1000 rupees per month. This will attract mores of young women towards it and will further increase the market share of the company.
2. Lakme should also concentrate on the cosmetic products for the mails. As today even boys are becoming more concerned of the way they are looking. More and more boys are turning out to be metro sexual. This category will rise in the future and lakme must concentrate on catching them so that the company can generate more sales from them.
3. Lakme must not limit itself to serve only the women, as it will be ignoring a large chunk of looks conscious and metro sexual boys.
4. It would be wise for the company to target young people in the above category and grow along with them as they and the nation prospers.
5. Many respondents in their answer as to why they did not take lakme product said that lakme does not provide a makeup or sunscreen lotion which is to be put only once as it is not moisture resistant. So lakme should work more in creating a water resistant sunscreen lotion which could stay all through the hard sweaty days.
6. More of the saloons should be created in order to provide easy accessibility to the consumers of the services and products provided by lakme.
7. Lakme can start contests for free makeover of women , as it was being started by dove, sunsilk and ponds in collaboration- be beautiful.
8. lakme has tied up with HUL – hence it must advertise in these websites also. It can also advertise in other beauty related sections of websites like vogue.com and feminaindia.com. Youth sites like mtstylecheckindia.com, facebook.com, orkut.com, twitter.com etc can also be targeted.
9. Lakme must not target people only when they start earning but much before that. To gain the 'early bird ' advantage they must organize sessions in schools and colleges giving explanations on how the medicure, pedicure, facials, massage etc can in general help in their overall development. . It can also bring about a stronger brand commitment in this manner.
10. Leverage information technology to service large numbers of customers efficiently and bring down overheads. Technology can complement or supplement distribution channels cost-effectively. It can also help improve customer service levels considerably.

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**CONCLUSION**

The different information or benefits derived from the in-depth study of the above mentioned information sources are as follows

1. Cosmetic industry in india- this section helped in knowing that cosmetic is not a new concept in india. People have been grooming themselves physically. The only difference is the addition of chemicals and technology to our personal grooming.
2. Competition existing in the present insurance market; there are many other companies posing tough competition to lakme ie Revlon , garnier, loreal, lotus etc.
3. All the marketing information sources has given a significant contribution to the detailed theoretical perspective for the research i.e. about consumer behavior an perception.
4. World Wide Web also worked as a highly important information source as it provides updated information for the research relating to various areas.

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**APPLYING THE EXPECTANCY THEORY TO EXPLAIN THE MOTIVATION OF USERS OF PERSONAL CARE PRODUCTS WITH SPECIAL REFERENCE TO HAIR OIL**

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**Prof. Archana Lahoti**Assistant Professor, SIMMC

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**ABSTRACT**

*The purpose of this research is to examine the motivation of users of Personal care products. A modified model of Vroom's Expectancy Theory, which includes five components, Expectancy, Extrinsic Instrumentality, Intrinsic Instrumentality, Extrinsic valence & Intrinsic valence is adopted & applied to the users of Personal Care products. The attempt was made to understand to what extent Intrinsic & extrinsic factors motivate users. The result indicates that both Intrinsic & Extrinsic factors motivate Hair oil users thereby motivating them to buy and use hair oil.*

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**INTRODUCTION**

India is having the world's second largest population. With 440mn millennial and 390mn Gen Z teens and children, India's consumer spending will be different. The expansion of Urban Mass, both in size and income level, will be the key driver of India's consumption story in the coming 5-10 years. Emerging business opportunities range from packaged snacks and dairy products to restaurants, premium personal care products, baby products, smartphones, scooters and branded jewelry. (Joshua Lu, 2016). Cosmetics and personal care products are important for quality of life, play an important role in building up self-esteem and enhancing social interactions every day for all the consumers from young millennial to older age groups. In a science-driven and fast-paced industry, consumers appreciate innovation most as a tool to drive product quality and efficacy. There is a positive relationship between usage of personal care products & quality of life, self-esteem and social interactions. (Chave, 2017)

Employee motivation and performance seeks to look at how best employees can be motivated in order to achieve high performance within a company or organization. This establishes the fact that money is for high performance but there is a need to look at other aspects of motivation which is not necessarily money. Vroom's expectancy theory of motivation is not about self-interest in rewards but about the associations people make towards expected outcomes and the contribution they feel they can make towards those outcomes. Three factors: expectancy, instrumentality and valence can motivate salesperson to exert effort to collect and transmit information from the field. The proposed conceptual model provides a manager a better understanding that salespeople will be motivated and given amount effort to contribute marketing intelligence activities if he gathers good information about competitors or about customers and receive a reward for the information transmitted, which he really wants to obtain (Wadie Nasri, 2012)

**REVIEW OF LITERATURE**

The Expectancy Theory of Motivation is best described as a process theory. With research pioneered by Edward C. Tolman and continued by Victor H. Vroom, Expectancy Theory provides an explanation of why individuals choose one behavioral option over others. The idea with this theory is that people are motivated to do something because they think their actions will lead to their desired outcome (Redmond, 2009).

"Expectancy theory proposes that work motivation is dependent upon the perceived association between performance and outcomes and individuals modify their behavior based on their calculation of anticipated outcomes" (Chen & Fang, 2008).

Vroom's theory explains why a person performs at a particular level. This has a practical and positive potential of improving motivation because it can, and has, helped leaders create motivational programs in the workplace. This theory provides the idea that an individual's motivation comes from believing they will get what they desire in the form of a reward. (AETC, 2008).

Expectancy theory is classified as a process theory of motivation because it emphasizes individual perceptions of the environment and subsequent interactions arising as a consequence of personal expectations. The theory states that individuals have different sets of goals and can be motivated if they believe that:

- There is a positive correlation between efforts and performance.
- Favorable performance will result in a desirable reward.
- The reward will satisfy an important need.

The desire to satisfy the need is strong enough to make the effort worthwhile (Lawler, Porter. L., Vroom, 2009).

In this study research has been done on the relationship between motivation and academic success as measured by the Valence, Instrumentality, and Expectancy Scale. Using Vroom’s Expectancy Theory as the framework, the research assesses the responses of 375 nurse assistant students in the state of Illinois to evaluate the self-report of the constructs of Vroom’s Expectancy theory in relation to their performance on a standardized high stakes test. (Whittington, 2015)

Vroom’s expectancy theory was used to show/that the motivational perceptions attributed to a set of sales "incentives" by a sample of life insurance salesmen were related to two performance criteria. (OLIVER, 1974)

In this study research has been done on the relationship between motivation and academic success as measured by the Valence, Instrumentality, and Expectancy Scale. Using Vroom’s Expectancy Theory as the framework, the research assesses the responses of nurse assistant students in the state of Illinois to evaluate the self-report of the constructs of Vroom’s Expectancy theory in relation to their performance on a standardized high stakes test. (Whittington, 2015).Vroom concludes that the force of motivation in an employee can be calculated using the formula:  $Motivation = Valence * Expectancy * Instrumentality$

A motivated employee is thus the product of the perceived level of satisfaction, the confidence to achieve, and the rewards that the employee hopes to receive on achieving the set goals. In other words,  $valence * expectancy * instrumentality = motivation$  (Iyer, 2009).

**OBJECTIVES**

1. To study demographic profile of Personal care products
2. To study the effect of Expectancy Theory on users of Hair Oil

**RESEARCH METHODOLOGY**

The procedure and the methods deployed in this paper are built upon the approach of the study by Chiang and Jang (2008) which was conducted on employees in the service industry context.

Data was distributed to 174 respondents, out of which 111 complete questionnaire were received

Research Design: Descriptive Research

Sampling Method: Simple random sampling Method

Sample Size: 111

**QUESTIONNAIRE DESIGN**

The five items in the hypotheses were used as umbrella constructs covered by a number of associated measuring items to gauge the motivation of hair oil users .The variables and measuring items were drawn from the literature particularly by adapting the items used by Chiang and Jang (2008). This comprised six measurement items for the expectancy of workers and 10 items to measure instrumentality items including five pertaining to extrinsic instrumentalities (i.e. rewards) and five relevant to intrinsic instrumentalities (i.e. good feelings as the outcomes of performance). In addition, nine items were used to measure valences where 5 was to gauge extrinsic valence and four to gauge intrinsic valences. *Motivation force* as in was measured utilizing eight measures.

All items used to measure the constructs of the model are illustrated in Table 1

**Table-1: Descriptive Statistic of Measurement Attribute**

Attribute
<b>Expectancy : if I use hair oil it will definitely</b>
Reduce hair Fall
Prevents premature greying
Prevents hair fall
Prevents dandruff
Rapid hair growth
Growth of lustrous hair
<b>Extrinsic Instrumentality : After Using hair oil</b>
Growth of lustrous hair
Reduced hair fall

Prevention of premature graying
Scalp nourishment
Hair Growth
<b>Intrinsic Instrumentality : after using Hair Oil</b>
Feeling of accomplishment
Feeling better
Increased confidence
Social Acceptance
Professional Acceptance
<b>Extrinsic Valence : value of the reward</b>
Presentable look
Praise from others
Healthy hair
Natural colored hair
Young looks
<b>Intrinsic Valence : value of the reward</b>
Feels confident
Attractiveness
Professional recognition
Professional Increment
<b>Motivation : when I am motivated to use hair oil , I will certainly</b>
Spend generously to buy my favorite brand
Buy natural products
Buy environment friendly products
Not change brand
Apply as per instructions
Spend enough time for hair care
Consult hair experts
Apply regularly

**RESEARCH HYPOTHESIS**

As discussed previously, the major elements of the modified version of expectancy theory comprise five variables, that is, *extrinsic instrumentality*, *intrinsic instrumentality*, *extrinsic valence* and *intrinsic valence* as well as *expectancy* (Chiang & Jang 2008). Hence, the following corresponding hypotheses to validate the relationship were considered:

- H1: Expectancy has a positive effect on Hair Oil users Motivation
- H2: Extrinsic Instrumentality has a positive effect on Hair Oil users Motivation
- H3: Intrinsic Instrumentality has a positive effect on Hair Oil users Motivation
- H4: Extrinsic Valence has a positive effect on Hair Oil users Motivation
- H5: Intrinsic Valence has a positive effect on Hair Oil users Motivation

Statistical Methods Used:MS Excel and SPSS version 20 is used validate the results

Data Analysis : Data Analysis was done with SPSS Version 20 and MS-Excel .Correlations was used to measure relationship between Motivation & Extrinsic instrumentality, Intrinsic instrumentality, Extrinsic valence and Intrinsic valence as well as expectancy respectively .

## RESULTS ARE AS FOLLOWS

Table-2: Frequency analysis for the demographic variables

Sr No	Characteristics	Category	Frequency	Percentage
1	Gender	Male	48	43.2
		Female	63	56.8
2	Age	18-28	53	47.7
		28-38	26	23.4
		38-48	25	22.5
		48-58	5	4.5
		58 & above	2	1.8
3	Marital Status	married	54	48.6
		unmarried	55	49.5
		others	2	1.8
4	Educational Qualification	SSC	4	3.6
		HSC	5	4.5
		Graduate	44	39.6
		Post_Gradute	46	41.4
		doctorate	12	10.8
5	Occupation	Govt job	2	1.8
		professional job	36	32.4
		self employed	7	6.3
		housewife	4	3.6
		student	38	34.2
		service	18	16.2
		other	6	5.4
6	Monthly Income	10000-30000	60	54.1
		30000-50000	26	23.4
		50000-70000	8	7.2
		70000&above	17	15.3

Table-3: Usage of Personal Care Products

Sr No	Characteristics	Response	Frequency	Percentage
1	Face Cream	Yes	79	71.2
		No	32	28.8
2	Moisturizer	Yes	81	73.0
		No	30	27.0
3	Face wash	yes	91	82.0
		no	20	18.0
4	Shampoo	yes	106	95.5
		no	5	4.5
5	Conditioner	yes	74	66.7
		no	37	33.3
6	Hair Oil	yes	104	93.7
		no	7	6.3

**Table-4: Correlation**  
Correlations

		expectancy	extrinsic_instrum etality	intrinsic_instume ntality	extrinsic_valence	intrinsic_valence	motivation
expectancy	Pearson Correlation	1	.539**	.402**	.454**	.391**	.499**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	111	111	111	111	111	111
extrinsic_instrumentality	Pearson Correlation	.539**	1	.690**	.606**	.541**	.634**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	111	111	111	111	111	111
intrinsic_instrumentality	Pearson Correlation	.402**	.690**	1	.666**	.605**	.517**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	111	111	111	111	111	111
extrinsic_valence	Pearson Correlation	.454**	.606**	.666**	1	.760**	.602**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	111	111	111	111	111	111
intrinsic_valence	Pearson Correlation	.391**	.541**	.605**	.760**	1	.544**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	111	111	111	111	111	111
motivation	Pearson Correlation	.499**	.634**	.517**	.602**	.544**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	111	111	111	111	111	111

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table-4: Data Analysis & Finding**

Sr No	Hypothesis	Correlations	Result
H1	Expectancy has a positive effect on Personal care products users Motivation	0.499	Accepted
H2	Extrinsic Instrumentality has a positive effect on Personal care products users Motivation	0.634	Accepted
H3	Intrinsic Instrumentality has a positive effect on Personal care products users Motivation	0.517	Accepted
H4	Extrinsic Valence has a positive effect on Personal care products users Motivation	0.602	Accepted
H5	Intrinsic Valence has a positive effect on Personal care products users Motivation	0.544	Accepted

**CONCLUSION**

The findings of this study reaffirm the validity of expectancy theory for the Personal care products users with special reference to Hair Oil . Motivation & Extrinsic instrumentality, Intrinsic instrumentality, Extrinsic valence , Intrinsic valence and expectancy are strongly related.

Expectancy theory would seem applicable to a where how motivated the users depends on whether they want the reward on offer for using hair oil and whether they believe more effort will lead to that reward. However, it could equally apply to other personal care products where someone use personal care products because they expect a certain outcome. Thus, Vroom's expectancy theory of motivation is not about self-interest in rewards but about the associations people make towards expected outcomes and the contribution they feel they can make towards those outcomes.



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**A STUDY ON AVIATION SERVICES FOR LOW COST CARRIER AND FULL SERVICE CARRIERS WITH SPECIAL REFERENCE TO MUMBAI AIRPORT**

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**ABSTRACT**

*The domestic and international traffic has developed drastically and many big as well as small players have entered the aviation arena. Seeing that the scope of services in aviation industry is constantly expanding and moving further into inter-disciplinary research, services are gaining a peculiarity in the aviation industry. This paper attempts to provide answers to the many questions like what would be the difference in passengers' perceptions choosing between low cost carriers and full service aviatiions. It further explores the facets of the sensitivity of a passenger to a change in fare and which flight products would persuade them to select either full service aviation or a low cost carrier. The study finds that there were significant differences between aviatiions passenger's perception for selecting the low cost carrier and full service carriers as both have their own significances and drawbacks.*

*Keywords: Aviation industry, aviation service, low cost carriers*

*JEL Classification: L93, L8, L89*

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**INTRODUCTION**

The present study is based on the aviation passenger's perception about Low Cost Aviatiions and Full service carriers in the aviation industry. This has been growing in interest because the delivery of high services is necessary for aviatiions' survival and competitiveness. Today, India is turn out to be one of the fastest growing aviation sectors in the world. With the liberalization of the Indian aviation sector, the aviation industry has gone through a tremendous structural change. It has experienced incredible improvement not only in passenger and cargo traffic but also in the number of aircrafts and aviatiions. From being primarily dominated by government-owned aviatiions, Air India and Indian Aviatiions, it is now dominated by private aviatiions, both full-service carriers and low-cost or no-frills carriers. Now, private aviatiions control around 75 per cent share of the domestic aviation industry. Lower air fares as a result of increased competition have made air travel accessible to a large number of people which has fueled the growth of the aviation sector in India. As airfares drop, an increasing number of middle-income travelers prefer to travel by air. However, to study the air passenger's perception for low cost aviatiions and full service carrier has been limited. This research paper focuses on the relationship, between customer's sensitivity to select the low cost aviatiions and full service carriers. The ultimate aim of the research is to obtain insights into the perceptions of passengers to a change in fare between low cost carriers and full service aviatiions, while determining which flight products are most important to passengers travelling on each type of carrier.

**OBJECTIVE OF THE STUDY**

The study aims at identifying perception of passengers towards low cost carriers and full service aviation.

**METHODOLOGY**

The survey based secondary data is collected from various sources that complement the primary research i.e. questionnaire. Most of the data have collected from the aviation websites, and principally from Indian Directorate General of Civil Aviation (DGCA) internet websites. It is the principal regulatory body in the field of civil aviation in India. It is responsible for formulation and enforcement of civil air regulations, air safety, and air worthiness and coordinates regularity functions with international Civil Aviation organization (ICAO).

In this study the respondents were the passengers who had flown on low cost carriers and full service aviatiions. The Questionnaires were distributed among passengers waiting in the departure lounges of Low Cost Carrier Terminal (LCCT) and full service aviatiions terminal at Chhatrapati Shivaji International Airport (International terminal) in Mumbai, India. A total of 50 questionnaires had being distributed among the passengers , in which only 40 questionnaires were filled up for further analysis.

**DISCUSSION**

The paper investigates those elements that distinguish Low Cost Carriers (LCC) with the Full Service Carriers (FCC) is its low unit operating costs and its low average price in the market it serves. (Reynolds-Feighan A., 2001).The growth of low cost carriers has shown that they can profitably compete with full-service carriers, mainly in the price-sensitive leisure market, on these variables (Fourie and Lubbe, 2006). As the number of low cost carriers has grown, these aviatiions have begun to compete with one another in addition to the full service

aviations. In these challenging circumstances, a comparative study on the similarities as well as differences between low cost carriers and full service aviations is apparently pertinent and crucial. Aviation services in spite of whether they are full service or low cost carriers are made up of a very complex mix of intangibles (Gursoy et al., 2005).

The study also, says that Indian air transport sector is among the most vibrant and fastest growing in the world. As per IATA forecasts, with GDP growth of 7.2% for 2005 to 2009, air traffic growth can be expected to be in the 15% range (Bisignani 2005). With less than 1% of its population currently traveling by air, India's growth potential is enormous. Within a period of 15 years, the number of Indian carriers has grown from 2 players to more than 10 today. More than 24.85 million passengers traveled between January and July 2007 as against 18.03 million in the same period last year (Awasthi 2007). Passengers expect aviations to ensure safe journey, support in mitigating problems due to critical incidents and of course meet time commitments.

A majority of people feels that the low cost carriers provide good connectivity. In realism, these low cost aviations connect a little more than 60 cities within the country. It was found that the middle class population of India including middle class which are those with an income of Rs.100000 to Rs. 500000 and the upper middle class, who are those with an income up to Rs.1000000 are usually the one's who have travel by low cost carrier, it is most popular among the office workers. The travelling of the passengers has been influenced, as passengers have started flying with low cost aviations more frequently.

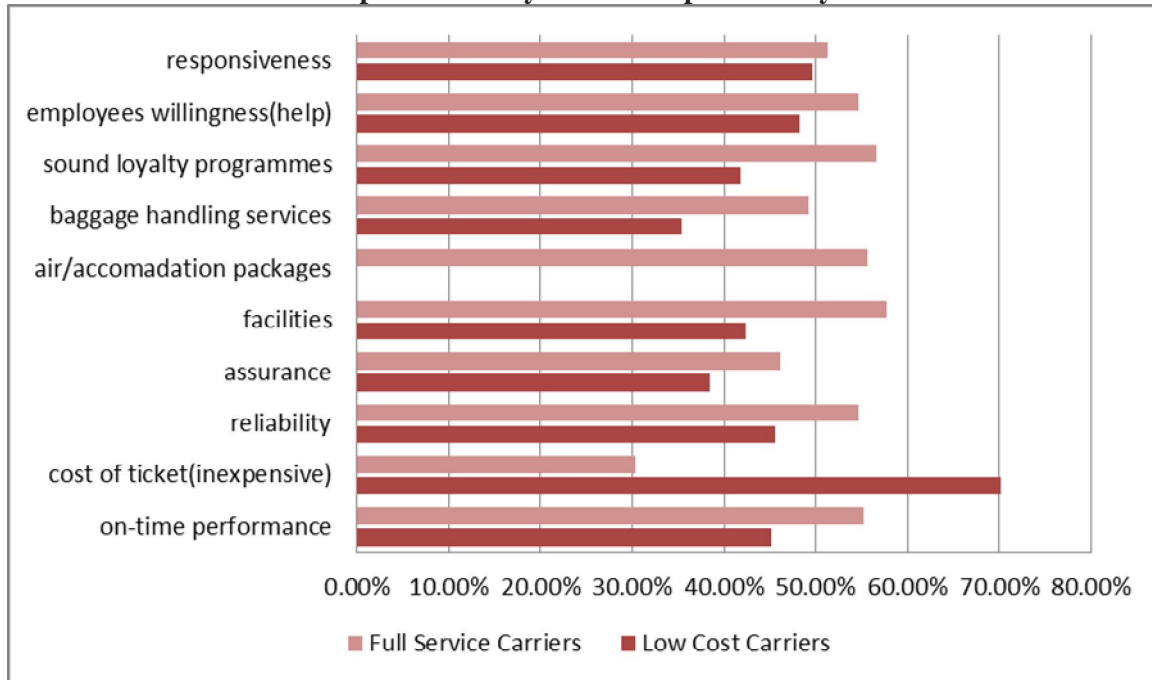
## RESULTS

According to the survey conducted through questionnaire at Chhatrapati Shivaji International Airport (International terminal) in Mumbai, India, it was found that the Low cost aviations are not considered on time by the people. A large no. of people i.e. 45.10% feel low cost carriers lack on-time performance than those of full service aviations i.e.55.20%. As time is very crucial, it is an important element for passengers to select Low Cost aviation or Full service aviation. The respondents were also asked to indicate the factors of cost of ticket to select the aviation.

The 70.12% passengers said that Low cost carriers offers more cheap fares than Full service aviations i.e.30.32%, and it is also a important factor in deciding the mode of transport they would want to travel by. In questionnaire, when respondents were asked about air/ accommodation it, known that Low Cost aviations don't provide with the any accommodation, in case there is any flight diversion or any contingency, but in case of Full Service aviations they provide it effectively. People perceive the quality of its services to be low. 37.4% of the respondents feel that low cost carriers provide bad quality of service as against 25.4% of the people who feel they provide good quality of service; the rest were neutral.

The research measures and compares differences in passengers' expectations of the desired aviation services in terms of the dimensions of reliability; assurance; facilities; employees; flight patterns; customization and responsiveness. It is keenly observed that passengers only prefer low cost carriers for their cheaper fair. In accordance to the respondents it is found that there is no significant difference between the passengers perception for selecting any of this carriers. Primary data were collected from passengers departing from Chhatrapati Shivaji International Airport (International terminal) in Mumbai. Regarding the service dimension expectations, differences analysis shows that there are no statistically significant differences between passengers who made their own aviation choice (decision makers) and those who did not (non-decision makers). However, there are significant differences among passengers of different ethnic groups/nationalities as well as among passengers who travel for different purposes, such as business, holiday and visiting friends/relatives. The findings also indicate that passengers consistently rank 'assurance' as the most important service dimension This indicates that passengers are concerned about the safety and security. The result indicated that, when compared between the two groups of travelers ,there was no significant difference in the perceptions of security between travelers who use LCCs and business travelers who use full-service aviations. The majority replied that fare was the most important factor in choosing to fly on a low cost aviation. The evidence presented indicates the principle differences in passengers' perception. Passengers are selecting low cost carriers primarily because of their low fares, while passengers selecting full service aviations opt for them in part because of the additional product services they provide.

Exhibit-1: Comparative study of services provided by LCC & FCC



Source: Survey result

An important element of this research was to establish the principle reason why each passenger had selected a particular aviation. A study undertaken by Proussaloglou and Koppleman (1995) on the demand for air carrier services concluded that carrier selection was based on a combination of factors that included the aviation's market presence, schedule convenience, low fares, on time performance, reliability and the availability of frequent flier programs. The perception is evident in the Indian market that passengers can use a combination of carrier types to reach their destinations, and that interlining via a low cost carrier network is certainly a workable option.

**FINDINGS AND IMPLICATIONS**

This study allows the aviation companies to see the expectancy level of customers for the LCC & FCC and service attributes. This study found that the passengers' expectations of the desired aviation services is in terms of the proportions of reliability; assurance; facilities; employees; flight patterns; customization and responsiveness. Thus, there was no difference between customers' expected quality of services among different categories of aviations. However, there were differences between passenger's perceptions for different categories of aviations'. Gap between perceptions and expectations were observed to be highest for Low Cost Carriers than Full service carriers. Overall, reliability of service was an area of concern for passengers across all categories of aviations. Breach between perceptions and expectations were observed to be highest for Low Cost Carriers than Full service carriers. In general, reliability of service was an area of concern for passengers crosswise for all categories of aviations.

Aviation industry experts believe that there is space for at least five domestic low-cost aviations cost carrier and those on a full service aviation, these appears to be no difference in the attitude and perception of passengers from two very different continents. It is obvious that passengers are travelling on low cost carriers place great importance on price and show to arrange their itineraries using the least expensive airfares. 60% of those passengers travelling on a low cost carrier surveyed did not look at any other carrier when booking their travel. It would emerge therefore that the brand reputation of low fare aviations has become entrenched into the minds of consumers.

The findings from this study are measured to be convincing in nature in that they can be used as key into managerial decision-making. The air fares are the major consents of the passengers of the aviations, in deciding for the mode of transport but safety is also a priority for passengers and should not be compromised in any way. More measures in security and well-trained/vigilant employees will give passengers more confidence. The on-time performance should also be considered, as it is another extremely ranked element. The service has to be more prompt/responsive, willing to help and having a courteous attitude must be a priority objective for the employees as part of the service ethnicity.

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**A STUDY OF COMPENSATION AND BENEFITS AT KF BIOPLANTS PRIVATE LIMITED**

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**ABSTRACT**

*The compensation and benefits process belong to most important HR Processes, which are critical for the organization and modern HR organization. The compensation and benefits are about managing the personnel expenses budget, setting the performance standards, setting the transparent compensation policies and introducing the competitive benefits for employees. The organization with effective compensation and benefits drives its personnel costs, manages the performance of employees and rewards the extraordinary performance.*

*The compensation and benefits processes introduce the transparency into Human Resources and rewarding employees for the achieved performance. The compensation and benefits provide the managers with the compensation tools to build a difference among employees as the high-performance corporate culture can be built in the organization.*

*The compensation and benefits define the compensation strategy, sets the transparent and simple compensation policy and defines the general rules for the extraordinary payments, bonus schemes applied in the organization and introduces general other compensation policies like the Relocation Policy, Short-Term Assignment Policies, Increment policy and other.*

*The compensation and benefits department of KF Bioplants Pvt Ltd. is usually responsible for the transparency in the compensation practices in the organization and keeping the internal fairness of the total cash, also set the standards for the individual salary increase, the mass salary review and the rules for the bonus payout as the organization keeps the financial stability and the planned personnel expenses. The compensation and benefits have to supervise the development of new compensation components and keeping the general rules of the component.*

*Keywords: Compensation, Benefits, Performance Standards.*

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**OBJECTIVES OF THE STUDY**

- To Study the Compensation & Benefits at KF Bioplants Pvt Ltd.
- To Study various components of compensation & Benefits at KF Bioplants.
- To Study the various benefits of Compensation & Benefits in KF Bioplants.

**SCOPE OF THE STUDY**

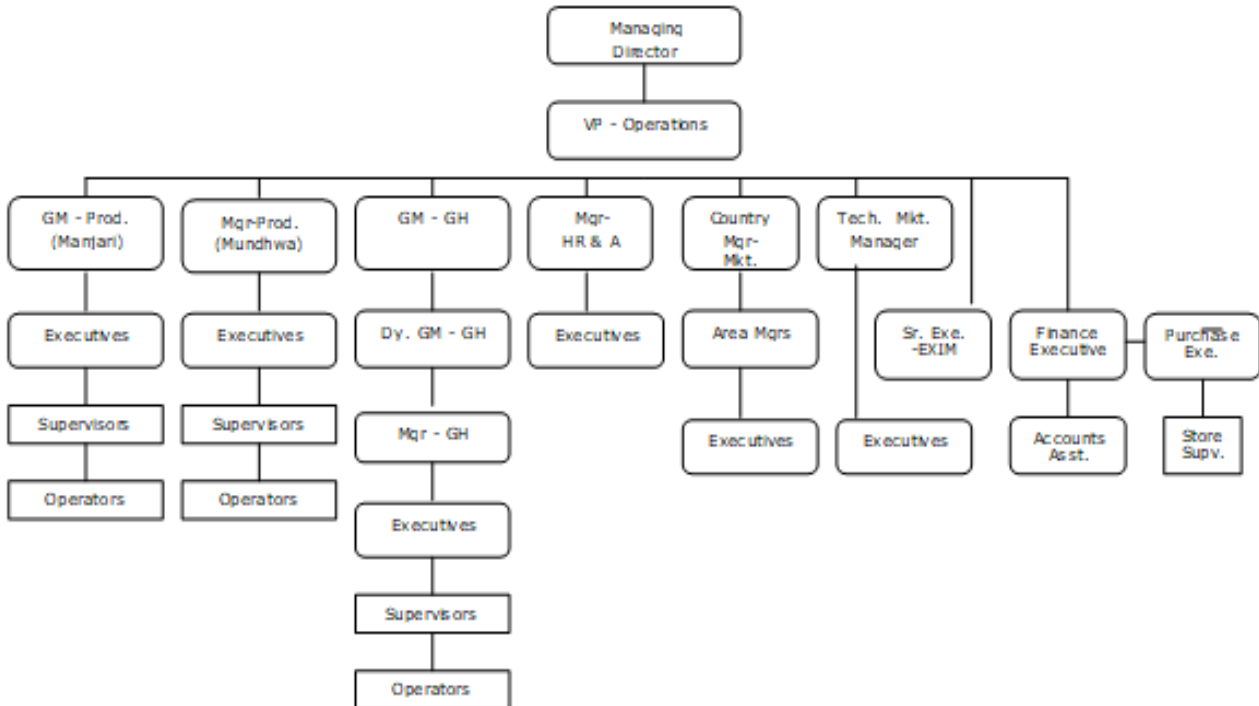
This study would give an overview of the Compensation & Benefits existing at KF Bioplants Pvt. Ltd. Since Compensation & Benefits are two important elements essential for improving the productivity of an organization, a study on the existing benefits to employees would help the organization perform better.

KF Bioplants Pvt. Ltd.

KF Bio plants is India's largest plant biotech company. A joint venture of Kumar group and florist Holland B V, Holland; it is a global provider of quality floricultural and ornamental plants, and high-value vegetable seeds and seedlings. The company supplies 60 million plants annually for commercial cultivation in India; and to 30 + countries worldwide. With more than two decades of experience, KF Bio plants is associated with leading global companies. Its world-class facilities are situated in Pune; 150km from Mumbai, India's commercial capital.

ORGANIZATIONAL CHART

ORGANIZATIONAL CHART



REVIEW OF LITERATURE

Compensation and Benefits is a tool used by management for a variety of purposes to further the existence of the company. Compensation and benefits may be adjusted according to the business needs, goals, and available resources. Compensation and benefits refers to the compensation/salary and other monetary and non-monetary benefits passed on by a firm to its employees. Compensation and benefits is an important aspect of HRM as it helps to keep the workforce motivated. It helps give benefits to employees based on their performance and actions and brings the best out of the employees at workplace.

History of Compensation and Benefit started through Barter system.

Prior to the introduction of money, trade was carried out through barter system. i.e. exchange of goods for goods.

Due to wasteful nature of barter, the amount of trade carried out by this method of exchange was limited.

COMPENSATION AND BENEFITS MAY BE USED TO

- Recruit and retain qualified employees.
- Increase or maintain morale/satisfaction.
- Reward and encourage peak performance.
- Achieve internal and external equity.
- Reduce turnover and encourage company loyalty.
- Modify (through negotiations) practices of unions.

Recruitment and retention of qualified employees is a common goal shared by many employers. To some extent, the availability and cost of qualified applicants for open positions is determined by market factors beyond the control of the employer. While an employer may set compensation levels for new hires and advertise those salary ranges, it does so in the context of other employers seeking to hire from the same applicant pool.

Morale and job satisfaction are affected by compensation. Often there is a balance (equity) that must be reached between the monetary value the employer is willing to pay and the sentiments of worth felt by the employee. In an attempt to save money, employers may opt to freeze salaries or salary levels at the expense of satisfaction

and morale. Conversely, an employer wishing to reduce employee turnover may seek to increase salaries and salary levels.

Compensation and benefits may also be used as a reward for exceptional job performance. Examples of such plans include: bonuses, commissions, stock, profit sharing, gain sharing.

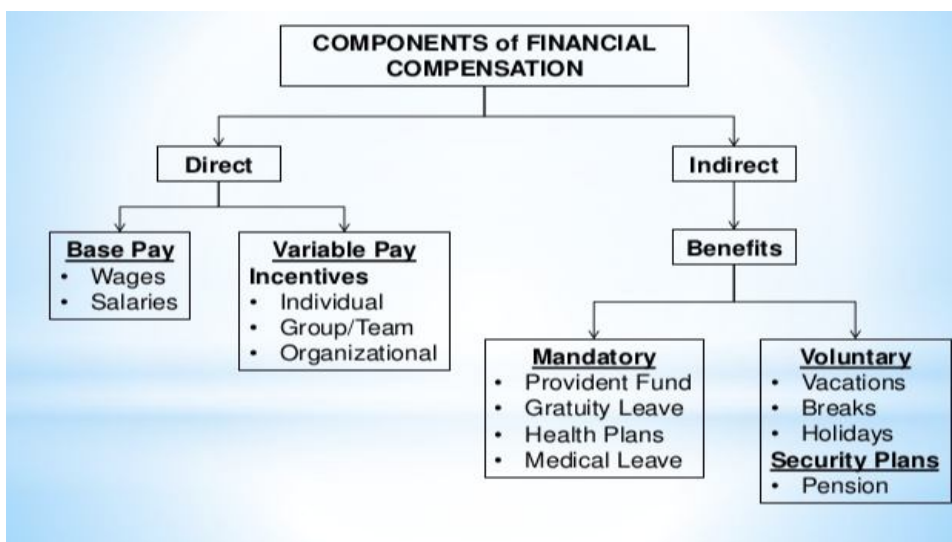
Compensation and benefits will be perceived by employees as fair if based on systematic components. Various compensation systems have developed to determine the value of positions. These systems utilize many similar components including, salary ranges/structures, and written procedures.

**Components of Compensation & Benefits system**



There can be several ways where benefits can be given to employees. Mostly it is given in terms of a **CTC** or **Gross salary**. Some of the various components of compensation and benefits are mentioned below:

1. **Fixed pay:** This is the basic salary paid to the employee irrespective of any other factor. This is stated clearly in the employment contract. This is the compensation or salary or wage which an employee or a worker will definitely get as long as he or she is an employee of the company
2. **Variable Pay:** This is the additional compensation paid to employee based on employee’s performance, company performance etc. Since variable pay is based on the performance of an individual, it motivates the employees to perform even better.
3. **Equity Pay:** Employees are awarded shares of the company, often at a discounted price. Employees are expected to make money out of them by the appreciation of the stock price and the growth of the company. This is mostly given to the senior management who have served the company for a long time
4. **Other benefits:** Benefits such as medical facilities, insurance policies, company owned car or flat etc all play an important role in motivating employees. These benefits are given by the company as a part of recognizing the services of an employee.





**➤ Medical Allowance**

Medical Allowance is a fixed allowance that an employer pays to its employees as a part of their salary to meet their regular medical needs.

In other words, a fix monthly allowance given as a part of your salary for the purpose of fulfilling your medical expenses is called Medical Allowance.

**➤ Incentives**

An incentive is something that motivates an individual to perform an action. The study of incentive structures is central to the study of all economic activities (both in terms of individual decision-making and in terms of co-operation and competition within a larger institutional structure).

**➤ Pay Structures**

Useful for standardizing compensation practices. Most pay structures include several grades with each grade containing a minimum salary/wage and either step increments or grade range. Step increments are common with union positions where the pay for each job is pre-determined through collective bargaining.

**➤ Salary Surveys**

Collections of salary and market data. May include average salaries, inflation indicators, cost of living indicators, salary budget averages. Companies may purchase results of surveys conducted by survey vendors or may conduct their own salary surveys.

**➤ Policies And Regulations**

**Policies** are principles, rules, and guidelines formulated or adopted by an organization to reach its long-term goals and typically published in a booklet or other form that is widely accessible.

**Regulations** are rules made by a government or other authority in order to control the way something is done or the way people behave.

**➤ Marketing Incentives**

Incentives in are provided to the Executives of Marketing Department as per the following criteria.

- First 6 months no incentive.
- After 6months to 1.5 years-0.1% incentive.
- From 1.5years to 3years-0.3% incentive.
- 3years onwards-0.5%

**➤ Allowances**

TA & DA are provided to the Employees who travel outdoor for company work purpose.

Traveling Allowances

- Local Traveling Allowance -100rs
- Out station Allowance -225rs
- After completing training period, benefit of statutory compliances (PF & ESIC) is provided to the employees.

**➤ Working Hours Policy**

For the staff; duty hours are 9 hours including half an hour lunch break, it can be taken between 1.00 pm to 3.00 pm. For other staff; it will be variable according to their workload.

**➤ Attendance Policy**

Punching is compulsory for everybody. Each employee has to do punching while coming and leaving the duty. Non punching of employee will be considered as absent.

All staff members to put in at least 48 hours of work per week.

1 weekly off minimum. Proper rotation of shifts so that no undue pressure or timings are imposed on employees.

**➤ Late Coming Policy**

All staff members are given 5 minutes grace period for attending their duty.

4 occasions of late coming beyond 15 minutes but maximum upto 29 minutes are ignored. Late comings beyond 15 minutes from 5th occasion onwards are subject to EL leave deduction or if there is zero leave balance ,1 day's salary deduction for every group of 3 late comings or part thereof. In any case late coming beyond ½ hour is treated as half day unless allowed concession by HOD in writing. Habitual late comers shall be subject to disciplinary action in addition to above deduction.

➤ **Early Going Policy**

As a courtesy, and not as a privilege, the management may allow early going upto 1 hour only once in a month. All other early goings of ½ hour or more shall be treated as half working day of that particular date. Persistent early goers shall be subject to disciplinary action.

➤ **Leave Policy**

Except for trainees, all regular employees on confirmation shall be entitled for leave as follows: - Leave record shall be maintained by way of individual leave card to be updated and submitted to HR for system updating.

➤ **Earned Leaves**

Earned leave shall be granted as per the Shop Act. These leaves shall be entitled to all employees after completion of their probation period. This leave; employee has to earn, that means after completion of one month of working his leave at prorata basis will get added on his leave account. All Confirmed employees shall be entitled to avail earned leave as per the policy. Employees may avail this leave with prior sanction of H.O.D.

For all employees earned leaves will be encashed in the month of March every year provided their leave balance is not less than 12 days. (Maximum 12Leaves will be carried forward or else encashed). Excess leaves will not be lapsed it will get encashed.

Encashment of earned leaves will be on Basic Salary for all employees.

Earned leave balance as on 31st March each year shall be carried forward to the next year.

➤ **Maternity Leaves**

All female employees who are covered under ESIC Act who have completed 90 days of continuous service without any break shall be entitled for Maternity leaves which is 90 days full pay. She has to produce all medical certificate which are essential to claim the benefit. All female executives (confirmed) who are not covered under ESIC Act shall be entitled for 90 days maternity leave under Maternity Benefit Act. She has to produce all medical certificate which are essential to claim the benefit.

Maternity benefit may be applicable to female employee who has less than 2 children.

➤ **Casual Leaves**

Employees are given 0.5-day casual leave/month, to attend to their personal and urgent requirements. These leaves cannot be clubbed with earned leave or other leaves.

Employees will have to apply in advance in the Leave Application Form to have their casual leaves granted.

➤ **Compensatory Off**

If an employee works on weekly off he may take compensatory off any time within 1year. If not, it willbe exhausted. If an employee works on National Holiday he may take compensatory off or may claim for monetary compensation. Compensatory offs can even be adjusted along with the employees leave, means he/she can take leave along with a compensatory off also.

➤ **Leave Rules**

If employee remains absent for whole week or 15 days or whole month his weekly off will be considered as absent day only, since he has not rendered any services during that particular time.

If employee has leave balance only 2 and if he wishes to take 4 leaves he will get 2 leaves paid and 2 leaves will be leave without pay.

➤ **Facilities**

- Canteen
- Transport

**TYPES OF COMPENSATION & BENEFITS IN KF BIOPLANTS PVT LTD****Compensation**➤ **Basic Pay + DA (Dearness allowances)**

Basic salary is the amount paid to an employee before any extras are added or taken off, such as reductions because of salary sacrifice schemes or an increase due to overtime or a bonus. DA is the allowance or cost paid of living allowance. A percentage of grade pay is paid as DA. Although it is seen that DA is greater than the grade pay itself. Both public servants and pensioners avail this allowance.

➤ **HRA**

House Rent Allowance is a component of the salary provided by the employer to his/her employee. If you receive **HRA** as part of your salary and you live in a rented accommodation, then you can claim full or partial **HRA**.

➤ **Education Allowances**

One of the most anticipated hike in this allowance by Central Government employees, but 7th Pay Commission has recommended the allowance would continue as CEA Rs.2250 pm per child and Hostel subsidy Rs.6750 pm per child. And the allowance will continue to be double for differently abled children. And the commission has strongly object to extend the allowance beyond Class XII.

➤ **Conveyance allowance**

Conveyance allowance, also called Transport Allowance is a type of allowance offered to employees of a company to compensate for their travel from residence to and from respective workplace location. Allowances are generally offered to employees on top of their basic salary component and may or may not be taxable as per the Income Tax Act.

➤ **Washing Allowances**

It is a sum paid to defray special expenses entailed by the nature of employment and as such this amount does not amount to wages. (In lieu of old instructions issued vide Memo No.Ins.III/2/1/65 dt. 8.2.1967)

**Benefits**

- **EPF (Employee Provident Fund)**- Employee's Provident Fund (EPF) is a retirement benefit scheme that's available to all salaried employees.
- **ESIC(Employee State Insurance Corporation)**- Employee's State Insurance (abbreviated as ESI) is a self-financing social security and health insurance scheme for Indian workers.
- **Bonus**- A monetary payment made to an employee over and above their standard **salary** or compensation package.
- **Gratuity** - Gratuity is a benefit received by an employee for services rendered to an organization. For companies covered under the Gratuity Act, this benefit is paid when an employee completes five or more years of service with the employer. An employee gets gratuity when he/she resigns, retires or is laid off

**CONCLUSION**

- ❖ It is concluded that the compensation & Benefit system at KF Bioplants Pvt. Ltd. is systematic and effective for evaluation of employees. Compensation and Benefit system adopted by the organization is simple and managed effectively.
- ❖ Compensation and Benefit procedure is well followed by the organization, the employees are given all the benefits as per Government norms.
- ❖ A well-organized Gratuity and Bonus plan is provided in the organization.
- ❖ Employees are guided for their overall development.

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**IS THE BASIC PURPOSE OF USING GENERIC MEDICINES TO REDUCE THERAPY COST BEING FULFILLED BY BRANDED GENERICS? AN OVERVIEW WITH REFERENCE TO INDIAN PHARMA MARKET**

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**ABSTRACT**

*Role of generic medicines in reducing the healthcare expenditure has been recognized for a long time. Multiple studies have proven that saving through substitution of originator brands by cheaper generic medicines, savings in the range of 10-90% can be achieved. Most national governments have been encouraging the use of generic medicines worldwide and many healthcare systems have policies of substituting expensive branded original medications with generic medicines. In the United States, generic substitution (GS) is an accepted practice and at the end of 2012, almost 80% of all the prescriptions were of generic medications. This has resulted in a substantial moderation of expenditure growth in widely used drugs and significant savings to the economy. In the United Kingdom, Generic Substitution is now a standard practice in hospitals operated by the National Health Service (NHS) and medical schools have included generic prescribing as a part of their medical training. Generic medicines provide the opportunity for major savings in health care expenditure directly to the consumers as well as to the government, given that they are generally lower in price than their brand name equivalents. Savings made by using generic medicines for established therapeutic care would provide scope for health care systems and patients to finance the purchase of the generally more expensive, innovative products required to treat illnesses that at present lack adequate pharmaceutical treatment.*

*This study aims at understanding whether the currently used Branded Generics help in reducing healthcare expenditure of the consumers and also whether the use of Branded Generics support the measures taken by the Indian Government to reduce healthcare expense.*

*Keywords: Generic medicines, Branded Generics, Healthcare expenditure, Generic substitution*

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**INTRODUCTION**

Branded generics are the generic drugs for which a drug manufacturing company has attached its brand name and may have invested in its marketing to differentiate it from other generic brands. A branded generic is an off-patented drug that is re-released into the market with a different branded name. Once the patent of a drug expires, any pharmaceutical company is free to manufacture and market the product. This product must be bioequivalent to the innovator and must be physically, chemically, and biologically stable. Branded generics are "Copies" or equivalent products which different manufacturers produce mimicking the branded product after the expiry of the patent or other clauses as defined in the Intellectual Property rights regulations. When major pharmaceutical companies see potential in a drug that is going to be generic in the near future, they start their own research and development process on it.

Major pharmaceutical companies, with their strong R&D and high standards, make generic products that are extremely competitive to the innovator's product and create their own brand. Once the drug receives regulatory approval to market the drug, it is brought into the market. This is called a branded generic. The drug may differ in color, shape, taste, inactive ingredients, preservatives and packaging. Because of these differences, the generic drug manufacturers are required to submit additional paperwork to the FDA to prove that their product is manufactured in accordance with good manufacturing practices (GMPs), and is as pure and stable as the brand-name product. Thus a drug that contains the same active ingredient, in the same amount, in the same form, dissolving at the same rate in equal amounts may be granted acceptance for substitution for a brand-name product.

More than 70% of India pharmaceutical market comprise of Branded generics. The cost of generic drugs is lesser as compared to Innovator brands, but far too high as that compared to Purely generic medicines. Hence even if these brands are prevalent in Indian market for long time now, they do not seem to benefit the patients in terms of reducing cost of therapy to a great extent. At least 90% of the Indian domestic pharma market of 1 Lakh Crores & more, comprises of drugs sold under Brand names.

The Indian pharmaceutical industry came into existence in 1901, when Bengal Chemical & Pharmaceutical Company started its maiden operation in Calcutta. The next few decades saw the pharmaceutical industry moving through several phases, largely in accordance with government policies. Commencing with repackaging

and preparation of formulations from imported bulk drugs, the Indian industry has moved on to become a net foreign exchange earner, and has been able to underline its presence in the global pharmaceutical arena as one of the top 55 drug producers worldwide. Currently, there are more than 3,400 registered pharmaceutical producers in India. There are 34,000 licensed pharmaceutical companies. India has more drug-manufacturing facilities that have been approved by the U.S. Food and Drug Administration than any country other than the US. Indian generics companies supply 84% of the AIDS drugs that Doctors without Borders uses to treat 1,20,000 patients in more than 30 countries.

### **OVERVIEW ON BRANDED GENERICS**

Branded Generics market is expanding at 7.7% CAGR over 2017 to 2023 to reach market value of US\$ 350.0 Billion by 2023 owing increase in prevalence of chronic and lifestyle disease in emerging markets. Based on diseases Indication, cardiovascular diseases sub-segment projected to garner larger market revenue share in over forecast period owing to rising co-morbidities like diabetes and cardiovascular diseases.

The concept of branded generics is more apt for countries like India. It can be explained as follows-

We have an XYZ company who is an Innovator and he developed a new tablet formula for headache now if we see the Indian scenario we can find 2 cases

1. All the big companies of India like Dr.Reddy's, Piramal healthcare, Sun pharmaceuticals can market the same innovator tablet with their own brand name then they are called branded generics (lot of money is spent in marketing their brand)
2. This scenario is more often seen with smaller companies where they market the same innovator tablet but they will market it with the actual chemical composition rather than with their own brand name (with this strategy the small companies can save more money and can also sell the drugs at cheaper price) now these are called generics

Example- Aspirin tablet is a generic and Disprin tablet is branded generic

Differentiation between an Innovator brand and a generic version:

Let's say a company ABC Pharmaceuticals Ltd has launched a novel molecule for cardiac failure called "cardiac" globally.

Company: ABC Pharma molecule: "Cardiac"

Brand name: "Cardiac- ABC-brand name"

In USA it'll be known by its brand name and the same name in India if the company wishes. Since it's a novel molecule, it's a patented product and the company has the sole rights. (for the tenure of patent only)

Now fast forward 20 years

Now let's assume, in India a company called Indio Pharma wishes to market the same molecule.

Since "Cardiac" is now off patent, it is now coming under GENERICS and not a patented molecule.

Indio Pharma can use its own brand name now.

Let's say

Company: Indio Pharma molecule: "Cardiac"

Brand name: "Cardiac-Indio brand"

After it is launched in India by INDIO, even if the molecule is not under patent protection it is known by its brand name "Cardiac-Indio brand"

This is branded generics: It's a generic molecule known by its brand name.

In case it is Purely generic, it would've been known by its molecule name, in this case "Cardiac".

### **What's the reason that Innovator drugs cost way more than the generic variants?**

Once upon a time (before the 1960s), the world was a lot simpler and medicines were too. The medicines available in the market then were all branded and each manufacturer of medicine had their own way to prepare a certain drug. The law at the time in USA and Europe required that medicines should maintain the manufacturing

process as per the manufacturer's specification. No safety, efficacy or quality data were required to be submitted to the authorities by the manufacturer prior to marketing the drug.

The Sulfanilamide Elixir Disaster (1937), Thalidomide Tragedy (1950–60s) as well as contamination of various vaccines in the first half of the 20th century brought focus on the need for safety, effectiveness and cost-benefit analysis of using powerful drugs in various diseases. This concern ran parallel to the exponential rise in the development of new drugs especially new antibiotics.

In the 1960s, the USA changed its laws which then required drug manufacturers to demonstrate that a particular drug works as they claim it would before they could sell on the market. This was the birth of the modern avatar of United States Food and Drug Administration (USFDA) (though the body was originally established in 1906). The evidence of effectiveness demanded by the USFDA gave rise to extensive clinical trials which in turn encouraged scientific rigor through evidence based medicine (EBM). In addition to basic science research to discover new drugs, clinical trials required thousands of patients to be administered the drug to be tested and proof of efficacy of a medicine established scientifically. The results were to be submitted to the regulatory body for approval. Costs of developing a new drug and conducting clinical trials runs into millions and sometimes billions of dollars. So when a successful drug comes through this long winded and expensive process, companies try to recover the R&D costs by selling those drugs at huge profit margins before the drug patent expires (typically about 10–20 years depending on the country and less than that in some countries). This is why branded drugs are expensive when a new drug comes in the market. So the high price of branded drugs comes down to market economics and the society's need for the invention of new and effective drugs. The new regulations spread to the rest of the world. Most industrialized countries accepted it and evidence based medicine became the global standard. To ensure ethical and safe clinical trials, Helsinki Declaration was drafted in 1964 which brought in new rules to follow with regard to clinical trials.

The clinical trials also created a difficult entry threshold for new companies to bring new products to the market since most of the new companies couldn't afford either good quality basic science research or the ever increasing costs of clinical trials.

In 1984, USA changed its drug regulatory laws again to regulate those manufacturers who manufacture the proprietary drug after its patent had lapsed. The new laws were aimed at simplifying the process, preventing reduplication of established results and for reducing cost threshold for new entrants. These new regulations didn't require the new manufacturers to repeat the expensive clinical trials of the original molecule but instead mandated that the new companies conduct and submit Bio-equivalence (BE) and Bio-availability (BA) studies to USFDA for approval of the drugs. The USFDA was also proactively involved in the enforcement

of the good manufacturing practices in the factories even before BE/BA reports were filed. This ensured that quality was maintained throughout the whole process. These rules were again readily accepted by drug regulatory authorities throughout the world. This was the birth of the generic medicines market.

### **RESEARCH OBJECTIVES**

- To analyze whether the widely used Branded Generics help in reducing the overall healthcare expenditure of the patients.
- To evaluate the measures taken by Indian Government to reduce Healthcare Expenditure of patients.
- To understand whether the use of Branded Generics support the measures taken by Indian Government to reduce the healthcare expenditure for common public.

### **SAMPLE SELECTION**

In and Around Pune District

### **DATA COLLECTION**

Through Questionnaire, Interview, Journal, Company Resources and Internet browsing.

### **METHOD OF ANALYSIS**

Exploratory and Descriptive Research

### **FINDINGS**

- 80% of the people think that cost of Medicines affect the overall healthcare expenditure
- 57% of the people are aware about what are Innovator Brands
- 55% of the people are aware about what are Branded Generics

- 76% of the people think that Branded Generics cost Lesser as compared to Innovator Brands
- 78% of the people think that there is a big difference in Cost of Branded Generics and Innovator Brands
- 45% of the people think that Branded Generics are as Efficacious as Innovator Brands
- 52% of the people say that Branded Generics are exclusively prescribed by Doctors whereas 47% of the people think that Innovator Brands are exclusively prescribed by the Doctors
- 70% of the people think that use of Innovator Brands increase the overall healthcare expenditure
- 66% of the people think that use of Branded Generics have helped to Decrease the overall therapy cost
- 73% of the people think that use of Branded Generics is beneficial for Patients
- 62% of the people think that Branded Generics are affordable for Poor Patients
- 71% of the people think that Reduction in Cost of Branded Generics is a better option to reduce healthcare expenses as compared replacing them by purely generic drugs
- 70% of the people prefer buying Branded Generics for personal use

### **CONCLUSION**

Cost of Medicines affect the Healthcare Expenditure to a great extent. As time has passed by people have become more alert and aware about options available to help them reduce the Healthcare expenses. Innovator Brands are far too costly due to the manufacturing costs and also the research which is been put into for Inventing the medicine. Branded Generics were brought into the market to cater the increasing demand of medicines and also is looked upon as an option for Innovator Brands for reducing the healthcare expenditure. Most of the people think that Use of Branded Generics has helped to reduce the healthcare expenditure and Branded Generics are affordable to poor patients. Most of the people prefer use of Branded Generics as compared to Innovator Brands for personal use.

If such is the case then what has compelled the Government to take aggressive steps to enforce the use of Purely Generics drugs needs to be found out and must be verified. Government has started taking firm steps regarding the use of Purely Generic drugs and is also ensuring the availability of the same by building a chain of Jan-Aushadies which cater only Purely generic medicines so that it can help the patients to reduce the overall healthcare expenditure.

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**A STUDY OF CSR INITIATIVES BY STATE BANK OF INDIA****Dr. Prabha Singh<sup>1</sup> and Shraddha Ghute<sup>2</sup>**Associate Professor<sup>1</sup> and Student<sup>2</sup>, Sadhu Vaswani Institute of Management Studies for Girls, Pune

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**ABSTRACT**

*Corporate Social Responsibility refers to the development of economy in a systematic way for ethically business purposes and at the same time enhances the standard of living of their workforce as well as society and environment at large. CSR strategies encourage the company to make a positive impact on the environment and stakeholders including consumers, employees, investors, communities, and others. In developing country like India, banking sector plays a vital role in upbringing the economy of the country not only by lending money, accepting deposits or increasing the liquidity of money but practicing business ethics and culture by adopting and implementing CSR. The main objective of the study is to examine the CSR activities carried out by State Bank of India. The study is based on secondary data. The period of study is for 3 year that is from 2012-13 to 2014-15. The variables selected for the study are women empowerment, education and farmers' welfare, financial literacy, community welfare, environment protection, new initiative related to CSR. The analysis shows that State Bank of India is already contributing for CSR activities. The study has a scope of further research where the CSR performance of banks can be related to financial performance of the bank.*

*Keywords: CSR, SBI, CSR reporting.*

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**INTRODUCTION**

The evolution of Corporate Social Responsibility in India refers to changes overtime in India of the cultural norms of corporate engaged in CSR activities. The concept of Corporate Social Responsibility (CSR) emerged in the latter half of the 20th century. Corporate social responsibility means management and relationship building with partners to improve the image and increase credibility of the company. In recent times, the corporate social responsibility is emerging as significant features of business philosophy, reflecting the impact of business on society in the context of sustainable development. Corporate social responsibility a voluntary commitment by firms to be responsible towards the environment and society in which they operate. According to Bowen, "Corporate social responsibility refers to the obligations of businessmen to pursue those policies to make those decisions or to follow those lines of relations which are desirable in terms of the objectives and values of our society.

Corporate social responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. Corporate social responsibility is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives while at the same time addressing the expectations of shareholders and stakeholders.

The present day's economic growth and development in India mostly depends upon a well-knit financial system which comprises a set of subsystems of financial institutions, financial market, and financial instruments. Both financial markets and financial institutions play a crucial role in the financial system by rendering various financial services to the Indian community. To highlight the role of banks in corporate social responsibility the Reserve Bank of India circulated a notice on Dec20, 2007 for all the scheduled commercial banks, with title "CSR, sustainable Development and Non-financial Reporting –Role of Banks". The Reserve Bank of India (RBI) 2011 on stressing the need for corporate social responsibility, suggested the banks to pay special attention towards integration of social and environmental concerns in their business operation to achieve sustainable development. The non-financial reporting (NFR) by the banks which will cover the work done by the banks towards the social, economic and environmental betterment of society.

**PYRAMID OF SOCIAL RESPONSIBILITY**

The fundamentals of corporate social responsibility rest on the fact that not only public policy but even corporate should be responsible enough to address social issues. Thus companies should deal with challenges and issues looked after to a certain extent by the states. Carroll's four-part model of corporate social responsibility reflects the outcome of this discussion.



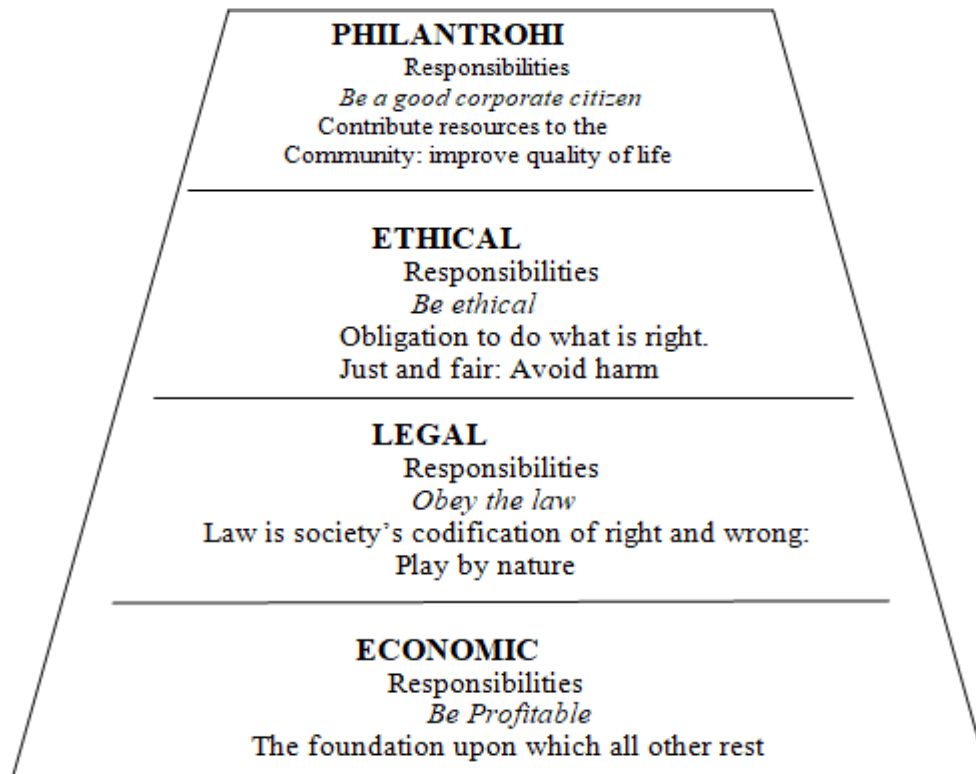


Fig-1: The pyramid of Social Responsibility

- **Economic responsibilities:** The first responsibility of the company is to satisfy economic needs of the society and generation of surplus for rewarding the investors and further expansion and diversification.
- **Legal responsibilities:** The legal framework consequentially fosters society's ethical view and all companies attempting to be socially responsible are therefore required by society to follow the law.
- **Ethical responsibilities:** They are norms which the society expects the business to observe like not resorting to hoardings and other malpractices.
- **Philanthropic responsibilities:** This involves corporation's willingness to enhance the quality of living for their stakeholders through charitable donation and organizational support. These corporate decisions are entirely voluntary, of less importance than the former three, and only seen as desired by society.

**OBJECTIVES OF THE STUDY**

- To understand the concept of corporate social responsibility.
- To examine the extent of corporate social responsibility activities practices by State Bank of India.

**REVIEW OF LITERATURE**

Brooks (2012) suggests that, Corporate social responsibility should emphasis upon the accountability of a company towards its stakeholders.

Sharma(2011) found that the activities of Corporate social responsibility performed by the Indian banking industry not up to the mark and there is differences in the provisions and actual performance with the help of Corporate social responsibility variables: children welfare, community welfare, education , environment, healthcare, poverty eradication, rural development, vocational training, women's empowerment and protection to girl child employment.

Dusuki and Dar(2005) identifies several driving forces behind the growing trend towards Corporate social responsibility initiatives like growing market pressure on social and ethical issues, increased power of communication etc. This is true that banks are paying more to their Corporate social responsibility activities but no so much as their earning increase. Common Corporate social responsibility practices in Bangladesh by different organization are centered on mainly poverty alleviation, healthcare, education, charity activates, youth development, women empowerment and music etc.

Mcwilliams(2002) suggests that Corporate social responsibility activities fuelled by political interests will generate a sustainable firm in

**METHODOLOGY OF THE STUDY**

This study is entirely based on secondary data which is collected from different sources. The data are generated by responsible authorities of the department, Newspaper articles, and Research paper published by various researchers on their site/reports. Apart from these, data is collected from various sources including books, Journals, magazines and websites.

The present study of State Bank of Indian was undertaken to know the important steps Government should take to improve contribution for corporate social responsibility activities.

On the basis of literature review following variables was taken for purpose of evaluation of corporate social responsibility practices by State Bank of India.

List of variables	Activities conducted.
Agriculture Policy	For the sake of Farmer welfare
Education Policy	Done for Promotion and welfare of education
Women Empowerment	No. of activities conducted for women welfare.
Financial Inclusion	Financial literacy and inclusion.
Community welfare	For the sake of community welfare.

**BRIEF PROFILE OF THE CSR ACTIVITIES CARRIED OUT BY STATE BANK OF INDIA(SBI).**

State Bank of India (SBI) is an Indian multinational banking and financial services company. The bank is actively involved in non – profit activity since 1973. The bank has a comprehensive (CSR) policy approved by the committee of Central Board in Aug, 2011. SBI has spent Rs.115.80 crores in the financial year 2014-15 for CSR. The Bank’s CSR activities touch the lives of millions of the poor and needy across the length and breadth of the country. The bank liberally donates to Prime Minister’s and Chief Minister’s relief funds for natural calamities. Besides this, SBI is highly devoted for the betterment of education, health of the society in India.

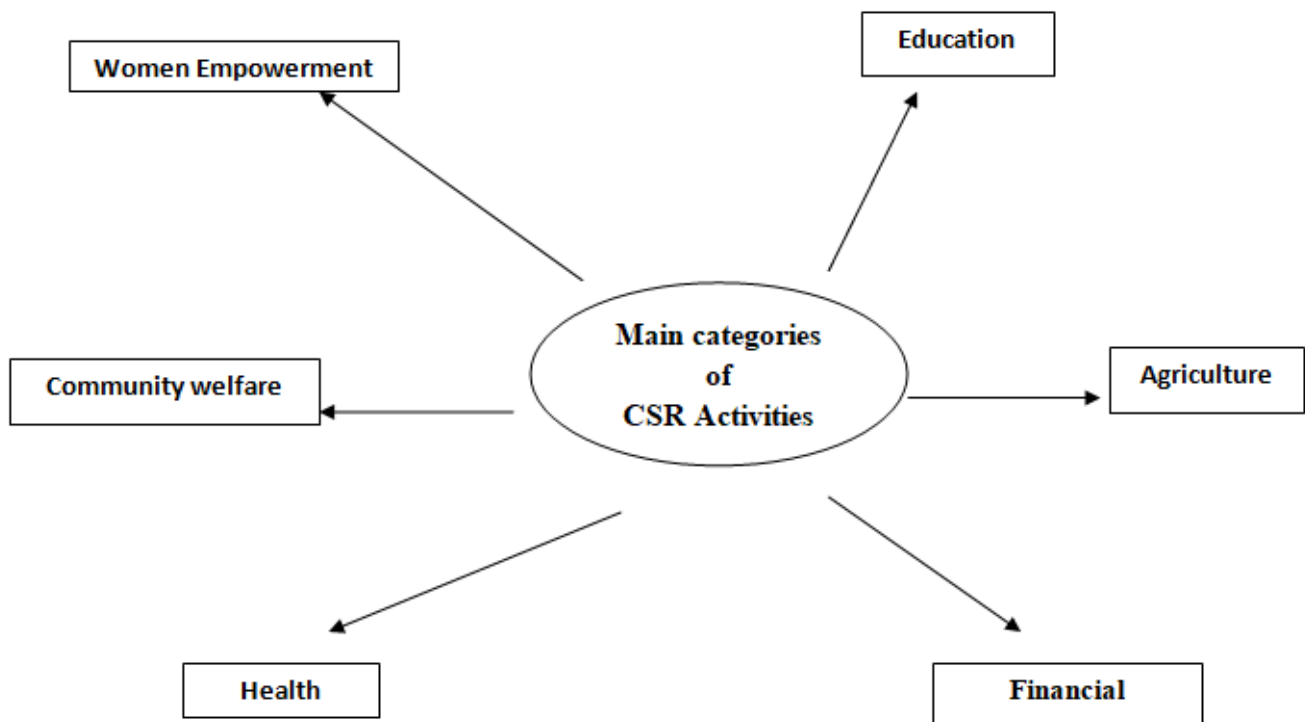


Fig-2: Main categories of CSR Activities

- **Agricultural Policy:** Indian economy has always been an agriculture based economy. Although the contribution of agriculture to the GDP of the country has decreased in past years, a large portion of population still depends upon agriculture for its survival. Due to poor economic health of agriculture sector, India observes a large number of cases of suicide among the farmers. Some of the activities carried out by the banks for the welfare of farmer’s are as follows:

- ❖ Agriculture Debt Waiver and Debt Relief Scheme,
- ❖ Special Credit Card for farmers,
- ❖ Establishment of Farmers clubs,

- ❖ Farmers' Training Centres(FTCs),
  - ❖ Agriculture knowledge sharing Programs,
  - ❖ National insurance programs for agriculture,
  - ❖ Debt Swap Schemes etc.
- **Education Policy:** SBI as a leading public sector bank plays a very key role in the field of education. It helps the needy people by providing education loan in the field of education. SBI education loan for students studies in India maximum 10 lacs and for abroad studies maximum 30 lacs. SBI Loan scheme for Vocational Education and Training was launched in July 2012 and loan upto 1.50 lacs are given under this scheme. It also provides scholarship in research areas.
  - **Women Empowerment:** SBI bank performed the CSR under this area by adoption of girl child under the age 6 to 14 years who belongs to poor family, orphan, physically challenged. With this provide 3000 to 5000 rupees expenditure on the monthly education.
  - **Financial Inclusion :** This variables is used to measure the extent up to which the banks are following the financial inclusion policy formulated by the Reserve Bank of India to promote balanced growth of the economy with the help of the programs launched by Government such as : Pradhan Mantri JeevanJyoti Bima Yojana(PMJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) Pradhan Mantri Jan - Dhan Yojana (PMJDY) all this yojanas helps to reduce the road block of the financial inclusion in the rural area.
  - **Community Welfare:** This variable is used to measure the activities performed by the SBI for the welfare of the community. SBI is always in forefront to help states affected by natural calamities. During the current fiscal SBI has lent its helping hand to the States of Assam, Sikkim, Uttarkhand, Maharashtra etc. It also helps the disabled persons by donating artificial limbs / wheelchairs. Campaigns against usage of alcohol, drugs and smoking, health awareness program and policies, distribution of food etc. are carried out.

## FINDINGS

- As business is an integral part of the social system it has to care for varied needs of the society.
- Social involvement of business would enhance a harmonious and healthy relationship between the society and business seeking mutual benefit for the both.
- Social involvement may create a better public image and goodwill for the company which further becomes instrumental in attracting customers, efficient personnel and investors.

## CONCLUSION

The analysis shows that SBI is making good efforts in the CSR area in order to attain the social objectives there is a need to frame a CSR policy and prioritization of activities for social spending and allocation of separate funds should be given for this specific purpose. The bank also created maximum value from its activities and developed strategies to effectively communicate progress with various stakeholders and provide information on the issues that concern them. To have an impact of spending and utilization of allocated budget by CSR there should be a system of periodical monitoring and reporting to the Board of Directors. In nutshell, it can be said that the state of mind of the Indian entrepreneurs towards CSR is changing due to tough competition in an international level. There are three suggestive measures which are advisable for a better CSR in bank. First is to enhance and accelerate government's involvement in CSR activities, Second can be noted as development of a broad sector of the consulting in the era of CSR, and lastly media should increase its interests and play a vital role in the era of CSR.

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**EMBEDDED SYSTEMS: INSIGHT****Krupali Rupesh Dhawale**Assistant Professor, DYPIMCAM, Akurdi

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**ABSTRACT**

*The paper introduces the purpose and importance of embedded system in surrounding ,Illustrates the main basic concept of embedded system which students must learn, such as the structure of hardware, embedded real-time operation system, debug method for embedded system, the application program of embedded system, etc. This paper introduce some basic concepts of microprocessors, microcomputers and microcontrollers because, these are the brain or the processing power behind any embedded system.*

*Keywords: Embedded system, Microcontroller, Microprocessor.*

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**I: INTRODUCTION**

Embedded System means technical components that are attached to another peripheral devices. [4] An embedded system is nothing but part of large system .An embedded system is a microprocessors, microcomputers and microcontrollers because, these are the brain or the processing power behind any embedded system. It has Real Time Operating system (RTOS) that supervises the application software. [8]An embedded operating system is an operating system for embedded computer systems. This type of operating system is typically designed to be resource-efficient and reliable. Resource efficiency comes at the cost of losing some functionality or granularity that larger computer operating systems provide, including functions which may not be used by the specialized applications they run. An embedded system consist three components:

- 1) System has hardware
- 2) System has application software
- 3) It has Real Time Operating system (RTOS) that supervises the application software.

Example: Embedded system used in Washing Machine, refrigerator, smoke sensors, DVD player etc.

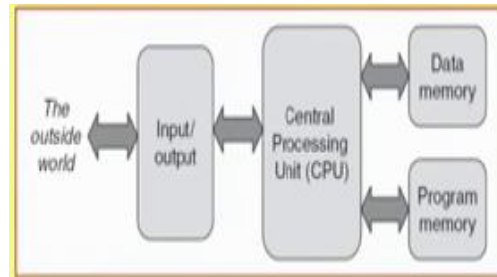
Examples of the embedded system demonstration that it has become a part of daily life in term of use. Now-a-days almost all of the embedded systems are connected with the internet[3].

Real-time operating system (RTOS) is a multitasking operating system intended for real-time applications. An operating system is considered real-time if it invariably enables its programs to perform tasks within specific time constraints. The RTOS performs few tasks, thus ensuring that the tasks will always be executed before the deadline. The RTOS drops or reduces certain functions when they cannot be executed within the time constraints. The RTOS monitors input consistently and in a timely manner. The main contents of RTOS include the fundamental concept, algorithm, kernel, task, interrupt and the transparent of RTOS, etc. Students are required to master the basic concept of RTOS, and transparent the RTOS to certain embedded system. In embedded software development, Students were introduced to the ideas of cross-platform development including host based embedded software development and embedded target environments, integrated development environments, interrupts and interrupt handling, and embedded software architectures[1].

**II: STRUCTURE OF EMBEDDED SYSTEMS**

- 1) Single-functioned –An embedded system usually performs a specialized operation and does the same repeatedly. For example: A pager always functions as a pager[8].
- 2) Tightly constrained – All computing systems have constraints on design metrics, but those on an embedded system can be especially tight. Design metrics is a measure of an implementation's features such as its cost, size, power, and performance. It must be of a size to fit on a single chip, must perform fast enough to process data in real time and consume minimum power to extend battery life.
- 3) Reactive and Real time – Many embedded systems must continually react to changes in the system's environment and must compute certain results in real time without any delay. Consider an example of a car cruise controller; it continually monitors and reacts to speed and brake sensors. It must compute acceleration or de-accelerations repeatedly within a limited time; a delayed computation can result in failure to control of the car.
- 4) Microprocessors based – It must be microprocessor or microcontroller based.

- 5) Memory – It must have a memory, as its software usually embeds in ROM. It does not need any secondary memories in the computer.
- 6) Connected – It must have connected peripherals to connect input and output devices.
- 7) HW-SW systems – Software is used for more features and Hardware is used for performance and security.



Block Diagram of Embedded System

**STRUCTURE OF AN EMBEDDED SYSTEM**

- Sensor – It measures the physical quantity and converts it to an electrical signal which can be read by an observer or by any electronic instrument like an A2D converter.[8] A sensor stores the measured quantity to the memory.
- A-D Converter – An analog-to-digital converter converts the analog signal sent by the sensor into a digital signal.
- Processor & ASICs – Processors process the data to measure the output and store it to the memory.
- D-A Converter – A digital-to-analog converter converts the digital data fed by the processor to analog data.

**STRUCTURE OF AN EMBEDDED SYSTEM CONSIST TWO TYPE OF ARCHITECTURE**

**Von Neumann Architecture**

In this architecture, one data path or bus exists for both instruction and data. As a result, the CPU does one operation at a time. It either fetches an instruction from memory, or performs read/write operation on data. So an instruction fetch and a data operation cannot occur simultaneously, sharing a common bus. It supports only simple hardware [8].

**Harvard Architecture**

Instructions and data are stored in separate memories .Typically followed in microcontroller, used for building embedded system. [8]In this architecture instructions are stored in ROM, while the temporally data stored in RAM.

Microprocessor: It consist basically the entire CPU fabricated on a single CPU. Microprocessor consists set of registers, ALU (Arithmetic Logic Unit), memory and I/O.

Microprocessors, MPUs are ideal for use in embedded systems, but their structure makes them particularly applicable to certain types of embedded systems.

Microcontroller: A microcontroller is an independent system with a processor, memory and General Purpose Input Output (GPIO) pins and can be used as an embedded system. Most of the microcontrollers in use today are embedded in other machinery, such as automobiles, smartphones, home appliances, and peripherals for computer systems [6]. The 8051 microcontroller was invented in 1980's by Intel. Its foundation is based on Harvard architecture and this microcontroller was developed principally for bringing it to be used in Embedded Systems. The top board using which you can step into the world of Embedded System are:

1. Raspberry Pi
2. Arduino

Additional items but the memory and also the Input Output interface is external. Typically the program is stored in non-volatile memory, such as NAND or serial Flash, and at start-up is loaded into an external DRAM and then commences execution[8].

**III: CHARACTERISTICS OF EMBEDDED SYSTEMS**

- 1) An embedded system is software embedded into computer hardware that makes a system dedicated to be used for variety of application [1].

- 2) Embedded system generally used for do specific task that provide real-time output on the basis of various characteristics of an embedded system.
- 3) The environment required for embedded system physical, human interference .The computer system is real system.
- 4) Real time operation is done by using embedded system, correctness of computation depends which is depend on hardware [5].
- 5) Embedded system critically handle various applications for that required : memory, processor, energy, space.
- 6) Power management: is a crucial factor to be considered for all embedded systems are powered by batteries.
- 7) QoS (Quality of Service); as a particular case, many applications require the provision of services in real time with stringent timing constraints

#### **IV: APPLICATIONS OF EMBEDDED SYSTEMS**

Embedded system works in various sector such Electronics telecommunication, smoke sensor , various computer network ,geographical system ,satellite system ,military areas, real time home project ,highway speed checker ,traffic control ,industrial temperature control, war spying robot .

Embedded-system based projects are proficient of doing multiple tasks, and are also accomplished of interfacing with the other networks and devices.

#### **CONCLUSION**

Embedded System is the future. This paper discussed the structures, characteristics and applications of different embedded systems used in our daily life.

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**FACTS RELATED TO WOMEN IN INDIAN POLICE ADMINISTRATION**

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**ABSTRACT**

*In the era of the competitive world, the role of women employee in an integral. The women is leading top rank organization in the globe. In the federal, democratic and civil nation of India, the role of women in increasing. Nowadays, women Police have now become an important part of the police administration. However, the current scenario for women police personnel is not much satisfactory in Indian Police. The study is based on women police personnel and their role in Indian police administration. The research paper is descriptive in nature. The researcher was used secondary data, where the data was collected from research papers, publications, websites, blogs, survey reports etc. The core objective of the study was, to investigate the facts on women police personnel and its basic roles in Indian administration. The research study, women police personnel have to fight against the internal as well external factors where, the strength of women police in India is much less than male police personnel. In India, the existence of women police officer is a smaller amount. The research study has come to point that, the duties and role of women police personnel is limited and they are dominated by male police officers. The study has included the recommendations given by various committees which established under the government regulatory to improve the role and image of women in Indian Police administration.*

*Keywords: Police personnel, Women police, Police Management, Women Administration.*

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**I. INTRODUCTION**

The role of women in the society was unseen. Women were restricted into house to handle the Childers, take care of elders. The Men were only person to work and earn bread for household. Still in many areas Men are more dominate than women. In the society men are assumed to be superior and stronger can able to handle work pressure than women. Due to social labelling, women are rumored to be weaker than men and always require more help and fortification from others (Chen, 2015). While by Channing the time the role and image of women at workplace has changed and the participation also increased. In 21<sup>st</sup> century it can easily trace out that the women also entering into industries and handling top ranked positions. The era of 21<sup>st</sup> century can be termed as the century of equal participation of women in various industries (Sabat & Mishra, 2010). Now-a-days it's barely any area today which has not been gratified by women. It has found that women can handle tough situations at workplace as women have more emotional depth than men. In India one of the tough and hectic Job is being a Police personnel. As Police department is worked for society. The role of police department were limited as compare to today's scenario. The job of police has been drastically changed where the job of police is multidimensional in nature. The job of Police is to maintain law and order, prevent the crimes, provides security to VVIPs, maintain harmony into society, provide security in various events (religious events), work in elections to maintain peace, prevent unlawful activists etc.

**II. WOMEN POLICE IN INDIA**

As the nature of duties is stiff, in such situations male police considered as domain because it requires physical and mental power. In India, police department is considered as male dominating the reason behind is the nature of work and 24 by 7 working hours are two core reasons. However, the participation of women in police services an integral part in all over the country. Being a women police required strong physical power and masculinity approach to solve the issues which uncertainly occurs in front of police. The Indian police services had refused to accept any women earlier where Indian police services accept the first women officer in 1976. The first women police station were setup into Calicut in Kerala in the year of 1973 (Srinivasan & Ilango, 2013). First competitive examination of IAS were held in the year of 1948 and in the year of 1951 first lady IAS entered into police department (George, 2011). Where, the strength of women police officers in India is 1, 40,184 (as on 1<sup>st</sup> January 2017) which is less than male police personnel (CHRI, 2018). In which the representation of women police personnel is more in the state of Chandigarh (18.05%) and less representation of women police in the state of Jammu & Kashmir (3.05%) as per data on police organization (as on 1<sup>st</sup> January 2017). In India out of 15,789 total police stations there are 613 women police stations is established with the aim of to protect rights of women, prevent crimes against the women's like sexual harassment, assault, violation and dowry harassment (RANDHAWA, 2013). As per data on police organization population per policemen is 663.35.



### III. RESEARCH METHODOLOGY

The research design chosen by the researcher is descriptive in nature. This study is based on women police personnel in India. The researcher was used secondary data where the data was collected from research papers, publications, websites, HR blogs, survey reports etc. The core objective of the study is to give highlight the roles, responsibility and challenges faced by Indian women police personnel. The research study has investigated previous research work related to women police officers in India.

#### OBJECTIVES

- To study the existence of women in Indian police department.
- To study the role of Indian women Police personnel in administration
- To identify the challenges faced by women Police personnel in India.

### IV. ROLE OF WOMEN POLICE

The role of women police personnel in administration is integral. According to the Bureau of Police Research and Development Report (1975), following are the core roles and duties of women police in Indian Police department (Joshi, 2015).

- Investigation of crimes related to women and children.
- VIP security
- Search and escort of women offenders.
- Looking after women and children in fairs and places of worship and in festival.
- Guarding over female prisoners in police lockups.
- Recovery of women and girls involved in abduction and kidnapping cases.
- Dealing with women agitators, satyagrahis and labour troubles in which women are involved.

Where the government of Karnataka has formulated guidelines regarding duties and functions of women police personnel are follows (M & P, 2016).

- Collecting information regarding women offenders.
- Arresting and searching women prisoners.
- Presenting juvenile crimes.
- Rescuing girls who are used for prostitution.
- Guiding women passengers at big railway stations.
- Maintain the law and order.

### V. CHALLENGES FOR WOMEN POLICE

- 1. Gender Discrimination:** Indian women faced discrimination at workplace and women often deprived of promotions, growth opportunities, leading position at workplace compare to male police personnel (Garg, 2014). The researcher in the study investigated that women police officers hardly get independent charge of police station and fundamental rights of women usually declined by male police officer at workplace (Joshi, 2015). The women police are not given mainstream tasks and often they are placed in control room or a typist in the department or in few cases women police is deployed to investigating minor offences against women.
- 2. Biases of Male Police Personnel:** The capability of women police personnel have not been recognized at workplace. Women police officers have to work similar kind of duty which is assigned by male personnel but in actual women get less chance to show her talent and present leadership quality in police department. Policewomen's are often not allowed to lead police station work and not promoted to take a core policing activities compare to male police personnel in India (Kumar, 2018).
- 3. Harassment at workplace:** The leader in Police department traditionally viewed as male dominance. Most of the cases being a male leader has impact on psychology of women police employees. The survey and research study is witnessed that sexual harassment at workplace reduces the dignity and performance of women personnel in Police department. The study has carried out that in police department the rate of physical and sexual harassment is exist and in the state of Haryana and Kerala it has found that 7.5 per cent of women police personnel was victim at workplace (Kumar, 2018).

4. **Unpredictable working hours:** In India, due to heavy workload, unbalance distribution of workload, biasness at workplace, inadequate centralized system, increasing population and less strength of women's in police services leads working hours. Due to unfixed working hours 90 per cent of women police personnel not able to manage work and family life (Kumar, 2018).
5. **Attitude of senior officers:** Male police officers are biased and dominating at workplace. The research study narrated that attitude of superior police officers is one of root cause which prohibit junior women police personnel at workplace.
6. **Inadequate Strength:** In India, strength of women police personnel is negligible compare to male police personnel. Where, the total strength of women police in India was recorded as 1,40,184 as on 1<sup>st</sup> January 2017. The strength of women police in top cadre is less. Though, it has negative impact on the moral of women police personnel in India.

## VI. SUGGESTIONS

The Commonwealth Human Rights Initiative (CHRI) has collectively given the following core suggestion to improve the current situation of Indian women police personnel (CHRI, 2018);

The National commission which was appointed by Indian government in 1980 had given strong recommendations that the number of police personnel specifically to ranks of Assistant sub Inspector and Senior Inspector should increase which directly help women police to contribute more in Indian Police administration. The Ministry of Home Affairs, Advisory on women Police was setup in the year of 2013, point out that women should give frontline tasks, each police station should have at least three women police and enrollment should increase compare to male police personnel in India. The ministry of Home Affairs, Advisory on Investigative Unites for Crimes against Women was setup in the year of 2015, ponder on establishment of Investigative Unites for Crimes against Women and such unit must consist women Police personnel in India.

## VII. CONCLUSION

In 21<sup>st</sup> century the role of women in various professional services is increasing drastically. On other hand, the enrollment of women personnel in Indian police department is less as far as other professional services are concern. The role of women police personnel in Indian Police administration is not satisfactory due the insufficient strength of women police. The study has concluded that the role of women in police department is not up-to the mark and women could not able get change to show her leadership qualities in Indian Police Administration. The role of women police is limited and they did not get equal status in police department. The Commonwealth Human Rights Initiative (CHRI) has given the suggestions to increase the existence of women police personnel in Indian administration.

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**NEED OF UN-EMPLOYMENT INSURANCE IN INDIA-EXPLORATORY STUDY**

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**ABSTRACT**

*Unemployment Insurance is quite popular in overseas countries like USA, UK, Australia, France, Germany, Nederland, Mexico, Newzeland etc In this a person purchases a insurance policy which offers him the benefits in case of he loses his job.*

*Unemployment Insurance can be provided by government or employee can obtain it by buying from insurance companies. India has no any such comprehensive plan for unemployment Insurance. This research paper focuses on global scenario of unemployment insurance and current status of India in terms of unemployment insurance and explore its need in current globalised India.*

*Keywords: Unemployment Insurance, unemployment insurance in India.*

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**1. INTRODUCTION**

Unemployment Insurance is quite popular in overseas countries like USA, UK, Australia, France, Germany, Nederland, Mexico, Newzeland etc in this a person purchases a insurance policy which offers him the benefits in case of he loses his job.

Unemployment Insurance can be provided by government or employee can obtain it by buying from insurance companies. India has no any such comprehensive plan for unemployment Insurance.

The first unemployment benefit scheme was started first in the United Kingdom with the National Insurance Act 1911 under the Liberal Party government of H. H. Asquith. Unemployment insurance or benefit is given to employees who are unemployed and on the condition they are searching for job and they are laid off by organization and not terminated or fired by organization.

**2. RESEARCH OBJECTIVES**

1. To review the current conditions of Un-employment Insurance in India and abroad.
2. To find the need and importance of Un-employment Insurance in India.

**3. RESEARCH METHODOLOGY**

As the nature of the present study is largely exploratory, data were collected from secondary sources.

**4. DATA ANALYSIS****4.1 CURRENT SCENERIO OF UNEMPLOYMENT INSURANCE IN INDIA**

As of now there is no unemployment insurance coverage in India. People have to rely on their own savings during the period on non-earning. Only Bharati Axa company has given such proposal to IRDA so far but there are no proper initiatives of government of India for unemployment insurance compared to countries overseas.

**4.1.1 WHAT IS AVAILABLE IN INDIA IN NON-EARNING PERIOD?**

**1.** During the study it is found that **CI(Critical illness policies)** are solution for some extent for non-earning period but it covers only a specific set of illness which are critical e.g cancer. In this it will pay loss of income during the time of illness and recovery.

**2. Rajiv Gandhi Shramik kalian yojana(RGSKY)** was added to the ESIC(Employment state insurance corporation of India) program in the year 2005. RGSKY is only a traditional unemployment insurance in the country. It provides medical care, maternity and work related disability benefit for employees having earning less than 15000 Rs per month in factories with 10 or more workers(20 or more in other establishments). It provides 50% wages a month for a maximum period of one year but it has limitation of having monthly wage less than Rs.15000 and he must contribute premium for at least three years.

**3. MNREGA(Mahatma Gandhi National Rural Employment Guarantee Act)** started in the year 2006 provides temporary income who guarantees 100 days of work to each rural household at the prevailing minimum wage but it limited to rural area and there is no provisions in urban area.

This shows there is no comprehensive program for un-employment. Government should work out on protection of the employees.

4. There are some **products** which take care of other associated liabilities, but they come tied with other things. For e.g., if you take a home loan, the home loan providing bank may have a condition to take something which can be called as a "Home Loan Protection Insurance" which may will take care of your EMI payments for a few months in case if you lose job . But as it is tied to your home loan, it will only take care of your EMI's only and not for any other expenses.

#### **5. GLOBAL SCENARIO OF UN-EMPLOYMENT INSURANCE.**

##### **USA**

In the United States unemployment insurance is provided by compulsory governmental insurance system and it is not based on Individuals taxes. Unemployment Insurance is a joint program between state government and federal government. It provides cash stipends to those who are seeking jobs and laid off by previous organizations but not those who are terminated or fired from jobs. Compensation to eligible employees is through the federal Unemployment Tax Act (FUTA). In this they are paid up to 26 weeks of cash benefits a year which provides half of the regular salary. If employee doesn't find employment during this 26 weeks he gets extended unemployment benefits for 13 to 20 weeks. Extended benefits will depend on overall unemployment situation in that particular state.

##### **JAPAN**

Unemployment benefits in Japan are called "unemployment insurance" and it matches to the US or Canadian system of "user pays" than the taxpayer funded systems in place in countries such as Britain, New Zealand, or Australia. It is provided from the contribution of by both the employer and employee.

##### **MEXICO**

Unemployment insurance system is based on workers contribution only which exists in Mexico City. It is provided to those who are at least 18 Years of age and have worked at least for six months and actively seeking for getting work. Benefits of unemployment are provided for up to six months and composed of 30 day's worth of minimum wage per month.

##### **GERMANY**

In Germany it is also called unemployment insurance. The insurance is looked after by the federal employment agency and funded from employee and employer contributions. Benefits are given to those who have contributed at least during 12 months preceding the job loss. The allowance will be paid for half of the period that the worker has contributed the unemployment insurance. Employee will get 60% of their previous net salary and 67% for employee with children.

##### **After a change in German law effective since 2008.**

- Aged 50 to 54 will receive an unemployment benefit for 15 months,
- Aged 55 to 57 for 18 months
- Aged 58 or older receive benefits for 24 months.
- For those under the age of 50 who have not been employed for more than 30 months in a job which paid into the social security scheme, full unemployment benefit can be received for a maximum period of 12 months.

##### **SPAIN**

In Spain state public employment agency as a part of social security system provides the unemployment benefit for which the based on contribution for a minimum period during time preceding unemployment. This system has two components contributory benefits and non contributory benefits.

Contributory benefits are paid to those who are unemployed with a minimum of 12 months contributions over a period of 6 years preceding unemployment. The benefit is payable for one third of the contribution period. The benefit amount is 70% of the legal reference salary plus additional amounts for persons with dependants. The non-contributory allowance is available to those who are no longer entitled to the contributory pension and who do not have income above 75% of the decided national minimum wage. In some countries, a significant proportion of unemployment benefits are distributed by trade and labour unions, which is known as the Ghent system.

#### **6. NEED AND IMPORTANCE OF THE UN-EMPLOYMENT INSURANCE IN INDIA**

##### **6.1 INDIA BECOMING GLOBALISED COUNTRY**

India is becoming more globalised country and more likely to face external shocks. Businesses in India are going to be depending on Global business and likely to suffer on global business environment so there is and will be always uncertainty for jobs.

**6.2 INDIA AND RAPID STRUCTURAL CHANGES**

India is going through a lot of structural changes due to open economy in terms of employment, technology, resources due to this becoming obsolete on job or in career has become a common problem now a days. People require a social security system like unemployment insurance benefit to tackle such situation.

**6.3 SOCIETAL CHANGES AND NUCLEAR FAMILY CONCEPT**

Nuclear family concept is rising in India. According to census 2011 nuclear families consist of 70.11 %. In India cases of divorce and separation, single parents, and people marrying late or opting to stay single are on rise. Previously joint family structure was protecting individuals from adverse conditions like unemployment and economy was on agricultural base but now more and more nuclear families are shifting to urban areas for employment and if they are unemployed, there is no protection or unemployment insurance to protect their family lives.

**7. FINDINGS**

1. India is going through lot of structural changes losing jobs have become quiet common.
2. As 70% are nuclear families living in India now a day's , unemployment is going to be a serious problem which questions a survival problem.
3. Overseas countries like USA, Canada, France, Germany, Australia, EU, Spain etc are already established unemployment insurance schemes in which government has taken the initiative in respective countries
4. There is no any comprehensive plan in India or initiative by government of India which will address unemployment insurance benefit.

**8. CONCLUSION**

Countries like USA, Canada, UK, France, Mexico, Germany, Spain etc have addressed the issues related to unemployment and has a mechanism to provide unemployment insurance benefits whoever looses their jobs. Indian government require to initiate and administer such unemployment insurance scheme which will be at par with countries like USA, UK, Canada which will provide social security and can prevent from the fear of survival when people are unemployed.

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**MANAGING OF ORGANISED RETAIL STORES THROUGH EFFECTIVE VISUAL MERCHANDISING**

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**ABSTRACT**

*While selling products most of the organized retailers makes use Visual merchandising (VM) which provides delightful shopping experience to it's customers and persuade them to to purchase instantly. Now, Visual Merchandising is used as a tool to promote the product and differentiate it from competitor's offerings. The VM is used both as a point of parity as well as point of difference in the retail industry. The VM plays a direct role in instigating the customers to make an instant decision of purchase. The purpose of this paper is to get insight from the existing literature of VM and make a foundation for future researches in the context of organized retail. The study covers a meta-analysis of existing researches and tried to find the relationship between VM and customer buying behavior. The study finds a significant association between VM and Customers behavior on the basis of analysis done on previous studies. The elements of VM as such store atmosphere, facade, VM displays, lighting and store layouts were considered relevant by many researchers in order to compel customer to purchase instantly.*

*Keywords: Visual Merchandising, Store layout, facade, Organised retailers, Customer behaviour.*

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**INTRODUCTION**

The Indian retail industry is expanding its canvas with a rapid growth. There is a huge potential of expansion in the Indian retail industry. On one hand, online retailers are conducting high sales by organizing big sales days while on other hand offline retailers are feeling a steep competition from e-commerce players to achieve their targeted level of sales. The offline retailer uses many strategies and practices to attract the customers at offline stores (physical retail store) including Visual Merchandising strategy. Visual merchandising (VM) plays its important role in presenting the overall view of offline retail store that depicts merchandise in an aesthetical appealing way.

The way, by which entrance of retail store, its store layout, arrangement of merchandise and season displays are depicted, come under the VM. The VM provides 'experience shopping' to customers. It creates an environment within the retail store that appeals the customers to try and purchase the products. The VM also gives message from retailer to its customer regarding the merchandise it offers. Besides the quality and taste the VM makes the customer to feel for the product. The modern retail has changed the way of offering products and services to the customers.

Now, the customer is informed about the product and attracted to offline retail stores to make purchases in an organized retail environment. When, a customer is in the retail store, VM informs, guides and influences him to make a purchase.

**VISUAL MERCHANDISING AS A CONCEPT**

**Ravazzi (2000)** explain the VM as natural component of modern point of sale (POS) which facilitate contact between clients and merchandise. The VM helps the customers to come across the product visually, physically and intellectually before touching the product offered by the retailer. The role of visual merchandising is very crucial in sales of offline retail stores.

According to **(Matthysz, 2003)**, "Visual merchandising involves everything the customer sees in approaching the store and after entering it. This includes the exterior appearance of the store, the store sign, display windows, interiors décor, store layout, fixturing, lighting, and the way the merchandise is presented and displayed within the store. Visual merchandising also includes activities that appeal to the customer's senses other than the visual, such as music or fragrance."

**Gormon (2006)**, stated that VM enhances products, facilitate brands, increase customer footfall and sales of the products. It increases visual appeal of products displayed for the purpose of the sale.

**Mathew (2008)** posited that "Visual merchandising display is the presentation of merchandise at its finest. VM Display is the glamour, the spark, the stage, and sparkle that surrounds a store and makes the consumers stop, look, and buy what has been placed together with care and presented with skill."

**Levi and Weitz (2009)** postulated that the VM assists and motivates the customers to make their planned, unplanned or impulse purchases. They further stated that the VM provides joyful buying experience for customers.

**Garvey (2010)** posited that “Visual merchandising encompasses all aspects of total visual impact of the store and its merchandise. Visual merchandising has come through a long way from stock piling on a table in front to numerous live models posing as per the season or theme in windows. Individual creativity, innovation, improvement in technology and artistic flair has played a major role in merchandise display.”

**Bhalla and Anuraag (2010)** stated that VM displays make shopping effortless for customers by creatively depicting merchandise. They considered efforts of VM as silent sales persons. VM provides an environment for the customer to select the merchandise as experience shopping. In modern retail, the visual merchandiser gives the merchandise a look & feels that appeals the customer to purchase even when the customer enters the retail outlet with no prior plan to purchase. Many of the displays of VM are seasonal, occasional and creative ones. The purpose of the VM displays is to add visual advantage to the products which appeals the customer to buy.

VM construct is made up of different elements. **Wanniachchi and Kumara (2016)** classified visual merchandising elements into two categories of exterior and interior elements. The elements as such signs, marquees, entrance and window displays were reckoned as exterior elements while mannequins, color's, lightings, cleanliness, music, interior signs, space & layouts, creative display, video display, focal points, and fragrance were considered as interior elements.

### CONSUMER BUYING BEHAVIOR IN RETAIL

Consumer buying behavior (CBB) is a widely researched construct. The study is confined to consumer decision making process in the offline retail store only. Generally, the customer feels a need to be fulfilled and goes to the retail store to satisfy the needs. But now the scenario for consumer decision making has been changed due to growth of middle class, increase in the disposable income of the customer, availability of choices and increase in the standard of living.

Generally, customer makes purchases in planned and non-planned way. In both ways VM plays an important part. In planned purchases, VM helps the customer to select desired products by VM displays. While in non-planned purchases, VM reminds and compels a customer to make purchase. The effectively implemented VM strategy triggers a customer and results in an impulse buying behavior of customer and adds to overall sales of the product. **Khaniwale (2015)** explained the consumer behavior as how customer choose and utilize the products and services to fulfill their wants.

### VM AND CBB IN THE CONTEXT OF ORGANIZED RETAIL - REVIEW OF LITERATURE

**Greenwood (1998)** concluded that VM elements impact the customer buying behavior. He stated that there was significant positive relationship found among promotional signage's, in store displays and consumer buying behavior.

**Turley and Milliman (2000)** researched on store atmospherics and its effect on consumer buying behavior. They found that the visually appealing store atmospherics has direct effect on consumer behavior and he spends more time in the store.

**Age (2004)** conducted a research to understand effect of store atmospheric on consumer shopping behavior. He found that store atmosphere is directly relate to customer buying behavior and compels the customer to spend more time in store. The findings of the study revealed that the customers who were impressed by store atmosphere, spent more time & money in that store.

**Kim (2012)** conducted a research on college going students to understand the impulse buying behavior of them. He found that there exist a significant relationship among impulse buying and promotional signage & in-store displays. He also found that as far as college students are concerned window display and floor merchandise were not found significantly relevant to appeal the students to go for impulse purchase. Yet, he found that all the elements of VM are interrelated and collectively become cause for impulse purchase among college students.

**Pillai, Iqbal, Umer, Maqbool and Namrata (2011)** conducted research on VM and found that the brand image is enhanced by visually pleasing displays at retail stores. They also found that the customer considers VM elements as most rated factors which compel him to go for real shopping in place of window shopping.

**Kouchekian and Gharibpoor (2012)** highlighted that VM elements as such store design, lighting, store layouts, colors, height of shelves and cleanliness are most contributing factors in insisting customers to reach to purchase decision.

**Michael and Cant (2013)** stated that the effect of VM displays on consumer buying behavior is confined to a limited amount. The VM only guides the customers to reach to the desired merchandise. They found that personal preferences of the customers impact more on consumer behavior as compared to VM displays.



**Kaur (2013)** found a significant relationship between in-store form display, window display, promotional signage and customer buying behavior. She identified cleanliness in store, attractive window display and innovative assortments as three most important factors that influence customers to purchase. The effective usage of VM elements increases customer traffic and sales performance of the store.

**Gupta (2013)** found that lighting and colors are the most significant elements of visual merchandising. They found favorable responses of customers towards colors and lighting as far as purchase behavior of customer is concerned. They found significant impact of these elements on consumer buying intentions as well. The signage as element of VM also found relevant to provide generic product information from the customer's point of view.

**Miremadi and Koei (2013)** found that staff management, visual merchandising and visual communication were given more importance by shoppers in Iranian retail environment.

**Madhavi and Leelavati (2013)** elaborated that awareness of fixtures, appealing qualities of lighting & materials, presentation style, path guidance and color of merchandise are significantly related to customer's purchase intention in offline stores. They further stated that VM display increases the chances of purchase and work as a stimulus which compel the customer to go for purchase.

**Kaur and Amandeep (2013)** highlighted that the physical contours and the sales staff in the store represents its identity. The VM efforts impact the customers and compel them to purchase. They found an equitable relationship among VM elements and customers buying behavior.

**Jigna, Ahir, Vishal and Mali (2013)** stated that the retailers use VM to differentiate their merchandise from their competitors.

**Jadhav and Chaudhary (2014)** conducted a research on identifying most crucial element of VM that influences customers psychological process, in store activities and resulting a buying decision. They found VM as an influencer which compels the customers to go for impulse buying. They also highlighted that effective VM helps the store in image building and works as competitive advantage for the store.

**Makhal (2015)** stated a significant relationship between VM and type of shopper. He found that the customer gives more value to store atmospherics, floor merchandise, music, lighting, cleanliness and aisle space in comparison of in store signage, color & texture of walls and store exterior.

**Saini, Gupta and Khurana (2015)** studied the effect of VM on customer impulse buying behavior. The purpose of the study was to find most crucial elements of VM which drive the customer's impulse buying decision. The study explored the existing literature of offline and online retail. The finding of the study highlighted that elements of VM has significant effect on consumer buying behavior. They found VM as very relevant in the context of consumer's impulse purchase. The VM elements of merchandise colors, presentation style, awareness of fixtures, path finding, sensory qualities of materials and lighting were found relevant in consumer buying decision process.

**Wanniachchi and Kumara (2016)** conducted research to understand the relationship between visual merchandising and consumer buying behavior in the context of readymade garments. The study was conducted in four readymade garment retail outlets located in Colombo. A judicious mix of branded and non-branded retail stores were taken for the purpose of sampling. The findings of the study suggested that there was a strong impact found among the visual merchandising (VM) elements and customer buying behavior. Customers found elements of VM as appealing and compelling enough to attract them towards the merchandise. The customers found window display and mannequins as biggest influencing elements in their purchase decision. The elements such as color combinations, lighting, use of music and creative display were found relevant in consumer buying.

**Prasad and Vetrivel (2016)** conducted research in order to assess effect of VM on customer buying behavior in retail context. They identified VM as tool to describe the image of retail store and to differentiate the store those from competitors. They found fixtures, colors, window display, lighting and mannequin directly related with customer buying behavior. The study highlighted window display and in store display as the force to drive customer to complete the purchase process. The study also recommended that the creative use of VM elements helps the retail store to attract customers and survive in the competition.

**Agdayemawer and Kumar (2017)** stated the importance of the VM in the modern time of retail in India. They conducted research on store attributes in order to understand the relationship between VM and customer buying choice. They gave stress on store presentation while competing with similar stores offering the same products and services. The study posited that the store appearance, lighting, music, window display, mannequins and

price tags are the dimensions of VM in organized retail. The study found these dimensions very relevant in order to make customer purchase planned or unplanned.

### **FINDINGS AND CONCLUSION**

The studies included in the review of literature highlighted many elements of visual merchandising and their importance in consumer buying decision process. The major elements of VM are given below:

1. Store entrance and façade
2. Signage (Internal and External)
3. Window displays
4. Mannequins and Dress forms
5. Colors and lightings
6. Cleanliness
7. Music
8. Aisels space & store layouts
9. Creative display
10. Video display
11. Focal points
12. Fragrance
13. Aroma
14. Floor Merchandising

The above mentioned VM elements are also depicted graphically in figure: 1. Offline retailer uses a combination of different elements of VM in order to attract, guide and force customer to purchase a product. As far as unplanned purchases are concerned, effective VM reminds and compels the customers to make a purchase decision.

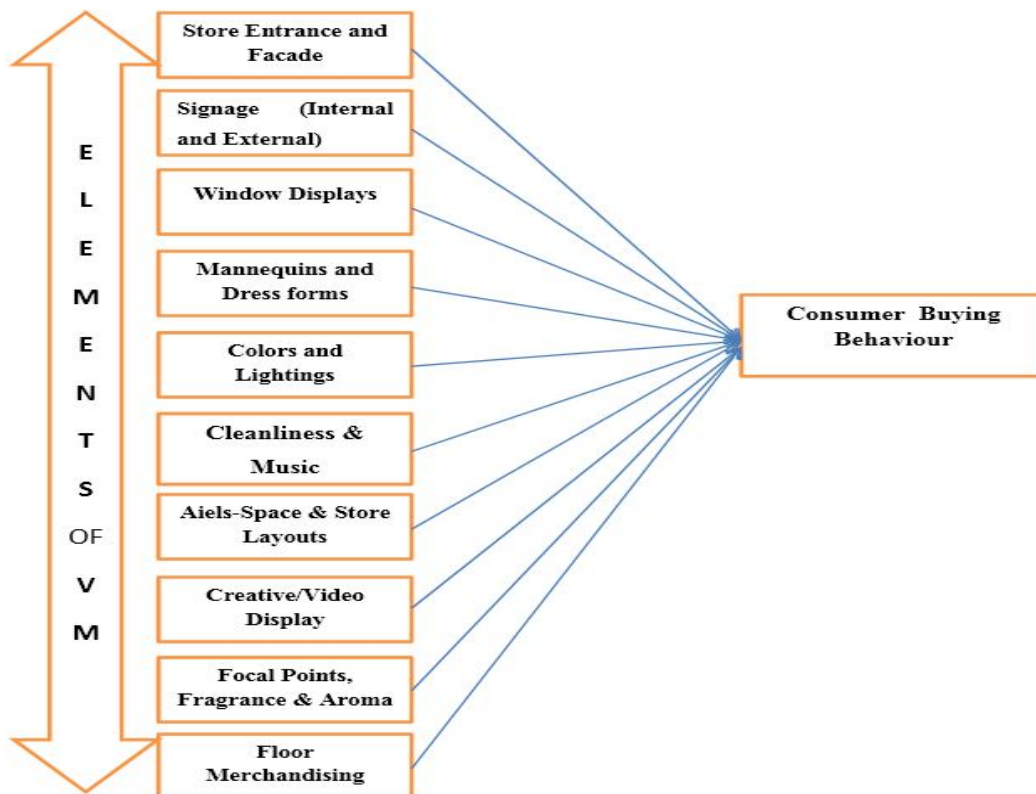
As per findings discussed of various studies, it is recommended that the offline retailer should work on VM elements like in store displays, lighting, colors, promotional signage and focal points to enhance the probability of purchase and close a sale call. While, some studies found that the use of VM is not a guarantee of sales to be done. But the importance of VM in the context of customer's retail buying process cannot be ignored.

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**Figure 1: Elements of VM & CBB**



**USE OF MEDIA AND TECHNOLOGY FOR EFFECTIVE COMMUNICATION OF MBA STUDENTS  
(WITH REFERENCE TO RMD SINHGAD SCHOOL OF MANAGEMENT STUDIES, PUNE)****Bachhav Priyanka Jibhau<sup>1</sup> and Dr. Chandrakant R. Mandlik<sup>2</sup>**Assistant Professor<sup>1</sup>, RMD Sinhgad School of Management Studies, Warje, PuneAssociate Professor<sup>2</sup>, Shri Shiv Chhatrapati College Junnar**ABSTRACT**

*This research paper focuses on effective communication of MBA students through help of media and technology. It emphasizes the cruciality of English Communication for MBA students as they need to face interviews and group discussions for their good placements in employment sector. The paper highlights the gravity of media for improving communication skills. As the world is moving with 4G speed with the advent of technology, it is expected that the young aspirants should utilize the media for their own development. Media and technology have taken a momentous role in development of nation as well as world.*

*The objectives of the research is to study the relevance of media in order to enhance the speaking capabilities of MBA students. Secondary objective is to find out different media and technology adopted for the communication development among the aspiring professionals in the classroom. Research Methodology incorporates primary as well as secondary data. Primary data has been collected in the form of questionnaire method filled by MBA students and few staff members. Secondary Data comprises of articles from internet, newspapers and few research papers. The research is descriptive and quantitative in nature. Probability Sampling Technique i.e. Simple Random Sampling is used for collecting data as equal chance is given to the students in the classroom. Sample size selected is 50 MBA students.*

*Literature Review is done by referring to few research dissertation on current topic. Data Analysis is represented in a form of graphical depiction such as pie-charts and bar graphs. Interpretation is about portraying meanings, conclusion and recommendations to the research. Conclusion and recommendations of the research paper tells that media is one of the pivotal aspect of communication whether in the form of oral or typed (written). In order to improve oneself, they have to make use of media and technology which will develop their personality with a 4G speed. If teachers are making the classroom digital then students must be an active learners to inculcate the good and fast things.*

*Keywords: Media and Technology, Communication Skills.*

**INTRODUCTION**

The universe is rapidly taking giant steps in the field of media and technology where it has become the essence of progress and development. Emerging industrialization has boosted brand-new modernization and innovations. Every year we can see new technologies evolving and developing. There is revolution in every discipline which we study during our graduates. Young graduates should be educated taking into attention the changing world which demands much more than the traditional approach. The industry demands competent and efficient professionals having fundamental skills i.e. Communication skills which has become the obligation of the day.

Communication is transmission of information from place to place in the form of may be vocals (voice) with the aid of technology or without technology, written (simply typed or in the form of email, magazines, etc), non-verbal (body language, pitch of the voice). The strength to communicate professionally is one of the undeniable aspect and of course demand of any developing corporate sector. Young graduates aim for MBA degree having a better future and they dream of getting placed in a good company having superior future. MBA students possessing exceptional skills tend to get placed easily. MBA curriculum derives and studies the demand by the industry and endeavours to implement among the students.

Students having varied graduation degree take admission for improving their skills so they are ready to become managers. MBA syllabi have many subjects which help students in their overall developing their identity. Subjects such as Organizational behaviour which highlights the behaviour appropriate for the professional life, Basics of Marketing which focuses on the persuading skills required for marketing the products, Business Communication Lab insists on professional communication which requires manners and etiquettes present while communicating whether it be written or oral. This subject is designed for cultivating the basic skills among students to make them face the competitive world. Latest media and technologies are used by the teachers to make learning interesting and technology driven.

Mobile, internet, Power-point presentations, and newspapers has been used in the classroom to make class more happening and desirable. Nowadays Mobile has become everyone's pocket internet including teachers. We get the latest update on mobile. Whatsapp is an android application for the purpose of interacting with the customers quickly by using device to automate, set and immediately respond to messages. Whatsapp has now becomes the easiest means of communication where you can share pictures, word/pdf documents, maps, graphical contents, videos, video-calling and many more. Students are encouraged to communicate through whatsapp following norms while messaging.

Students are allocated specific topics to be presented with the help of power-point presentation. They get an opportunity to use the new technology, how to prepare slides, how to present using the slides and appropriate body language. Online newspaper helps to gain knowledge regarding current incidence and events. Students are given exposure to different online newspapers such as The Economic Times, The Times of India, The Hindu and The Financial Express. English movies drives the listening ability in students. Media and Technology helps students in developing their interaction skills.

### **OBJECTIVES OF THE STUDY**

1. To study the value of media and technology for improving communication skills.
2. To study different media and technology used by the teachers for MBA students' skill enrichment.
3. To find whether the media and technology has helped the MBA students in better pursuance.

### **RESEARCH PROBLEM**

1. MBA students are deficient in English communication skills as majority of them are from regional medium school.
2. They are not well-versed with the latest media and technology for business communication.

### **REVIEW OF LITERATURE**

(Hurn, 2009, Vol.41 Iss: 6) The purpose of the paper is to expose that English language has emerged as the international language for business and trade. The author laments that there should be simpler and standardised international English for doing business. The paper scrutinizes the determination for widespread of English, its pros and cons and presupposes need for simple English for international communication.

(Borghain, 2017) The commencement of internet has boosted the whole new era of generation. Communication, relationships and psychological well-being of adults have changed due to revolution of internet. Most of the adults spend about 70-80% of time on internet. Adolescence is the generation of skills acquisition. Internet usage in a better way helps to enhance different skills including communication skills.

(Kumar, 2015) The author states that in order to acquire excellence in every step of aggressive competitive world, soft skills and hard skills are the most essential skills to be developed by the students. These skills can be assimilated among students by providing them proper training and application. Soft skills contributes about 85% over hard skills as the chances of getting placed increases. Candidates having excellent academic record but unable to express his thoughts and intelligence is not zero value. The study tries to pinpoint the essentiality of communication skills at the B-school level. The author says that the current syllabus fails to put weightage to communication skills in B- schools. Through analysis it is found that students having competency in speaking English have good placement opportunities and career growth. They can become better leaders and entrepreneurs.

(Bansilal, 2016) The author insists on use of Information and Communication Technology (ICT) recommended by the Curriculum Reform Cell for strategic teaching and learning tool. This study emphasizes on usage of computer technology more adequately and productively for the growth of language skills. It is an effort to contribute computer based activities and make learning more innovative and interesting for students. Use of Computer can help the teacher in bringing creativity in lessons and make learning challenging. For example, the teacher can generate his own digital books with pictures, movies, videos, etc.

### **SCOPE AND LIMITATIONS**

Students from RMD Sinhgad School of Management Studies usually come from rural culture. Most of their graduation have been accomplished in regional or semi-english language. Due to this, they are confronted with lot of communication gap. They are unable to perform well in most of the aspects. They are unable to present themselves in an appropriate manner which leads to their failure in getting placed in good companies.

So in order to improve upon their conduct, it is essential that they are exposed to various exercises and practices which will help to imbibe in themselves the urgency of communication skills. Technological advancements has changed the educational scenario. Technology and communication go hand in hand. Communication via technology has gain its root in the field of global industrialization. Today’s generation should have technological outlook and teachers should make the students realize its essentiality. Media and Technology such as Online books, online newspaper, Power-point presentations, mobile internet, mock interview with video recording etc. can make the teaching-learning practice more delightful and intriguing. This study focuses on media and technological use in improving communication of MBA students.

The study is limited to only one college of MBA. The study can be extended to most of the MBA colleges in Pune city. Students were distributed questionnaires in the classroom. As all the students were not present at that time, the research became limited to the students present in the classroom.

**RESEARCH METHODOLOGY**

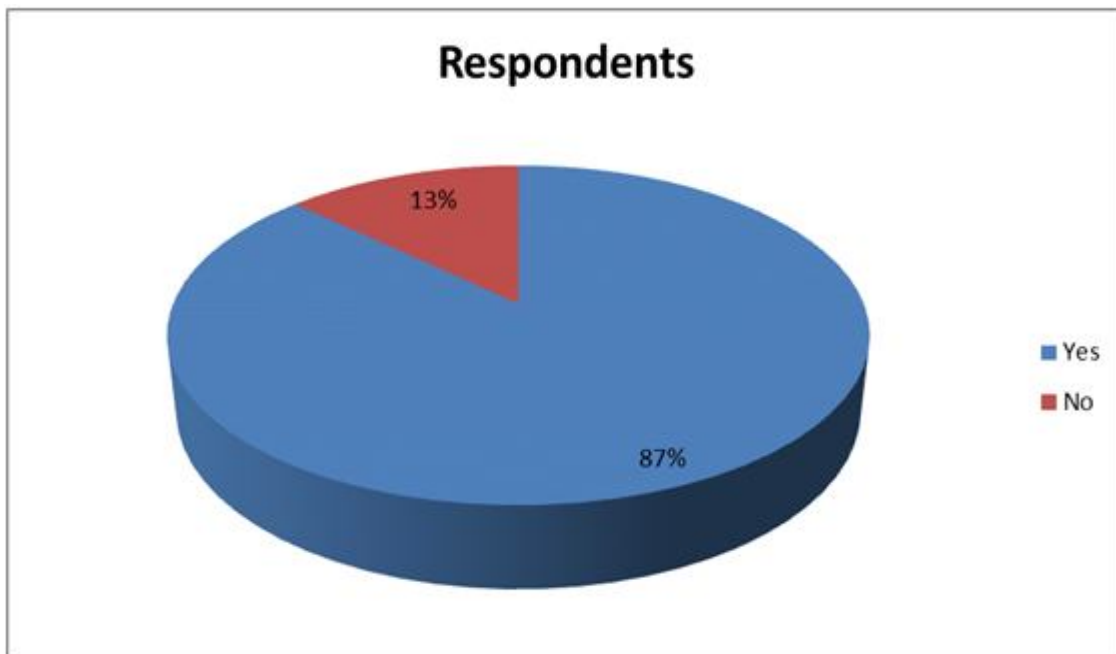
Research methodology used is primary as well secondary data. Primary data is compiled through distributing the questionnaires among MBA students in the classroom. 10 questions relevant to the objectives of the study are formulated in order to get appropriate information. Secondary data is studied from various sources such as literature review from research papers and PhD thesis, online books and some books.

Research design is descriptive and quantitative in nature where survey is done through data collection and the information will be executed in a simple graphical pattern using bar graphs and pie charts. Sampling is one of the most essential aspect which indicates effectiveness of the research. Sampling method used is Probability Sampling i.e. simple random sampling where every element has an equivalent chance to be the part of the sample. Sample size selected is 50 out of 140 of total population.

**DATA ANALYSIS AND INTERPRETATION**

**1. Subjects that help to improve communication skills.**

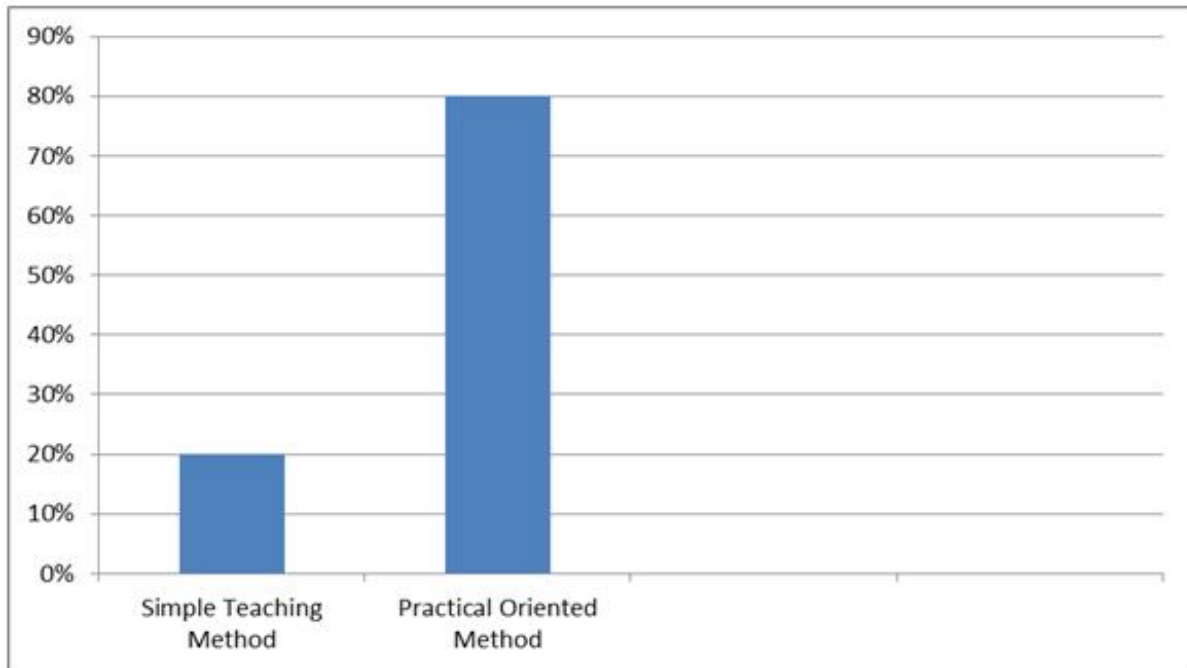
Response	Yes	No	Total
Number of Respondents	44	6	50
In Percentage (%)	87%	13%	100%



**Interpretation:** MBA curriculum has Business Communication Lab (108) as an internal subject which intends to enhance the communication intelligence among MBA students.

**2. Methods for improving communication in the classroom.**

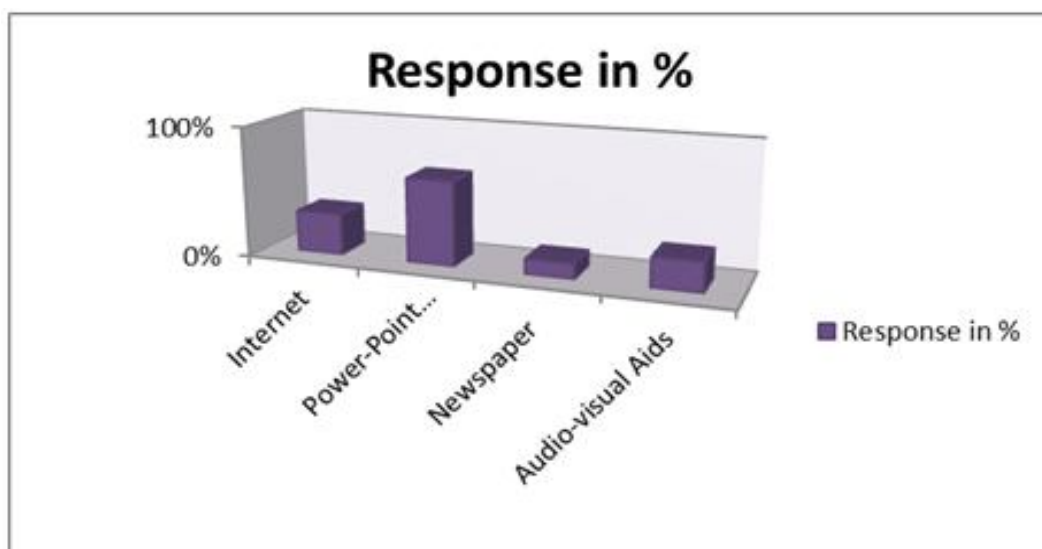
Response	Simple Teaching Method	Practical Oriented Method	Total
Number of Respondents	10	40	50
In Percentage (%)	20%	80%	100%



**Interpretation:** Practical Oriented Method is more beneficial than Simple Teaching Method which includes Personal interview, Group discussion, Debate, Oral Presentations using Power-point presentations. This gives opportunity to the students to get involved in the communication.

**3. Media used frequently in the classroom for improving communication.**

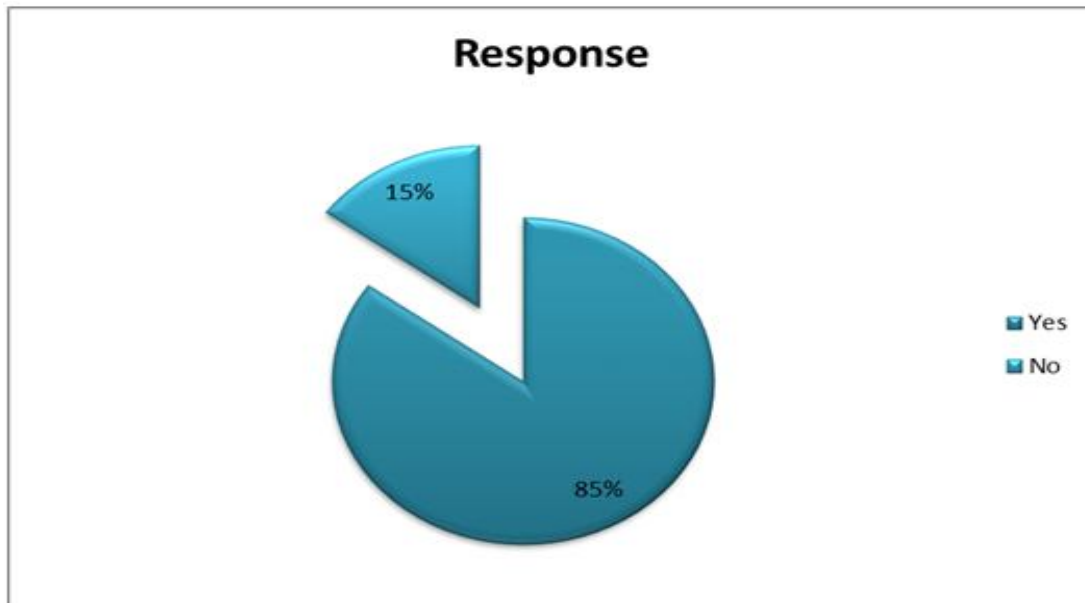
Media	No. of Respondents	In Percentage (%)
Internet	16	32%
Power-point Presentation	33	65%
Newspaper	6	12%
Audio-Visual Aids	11	23%



**Interpretation:** Power-point Presentation help the students to improve their written skills involved in making PPTs, presentation skills which involves speaking. Other Media is also used such as internet and newspaper in the classroom.

**4. Facing mock interview / group discussion.**

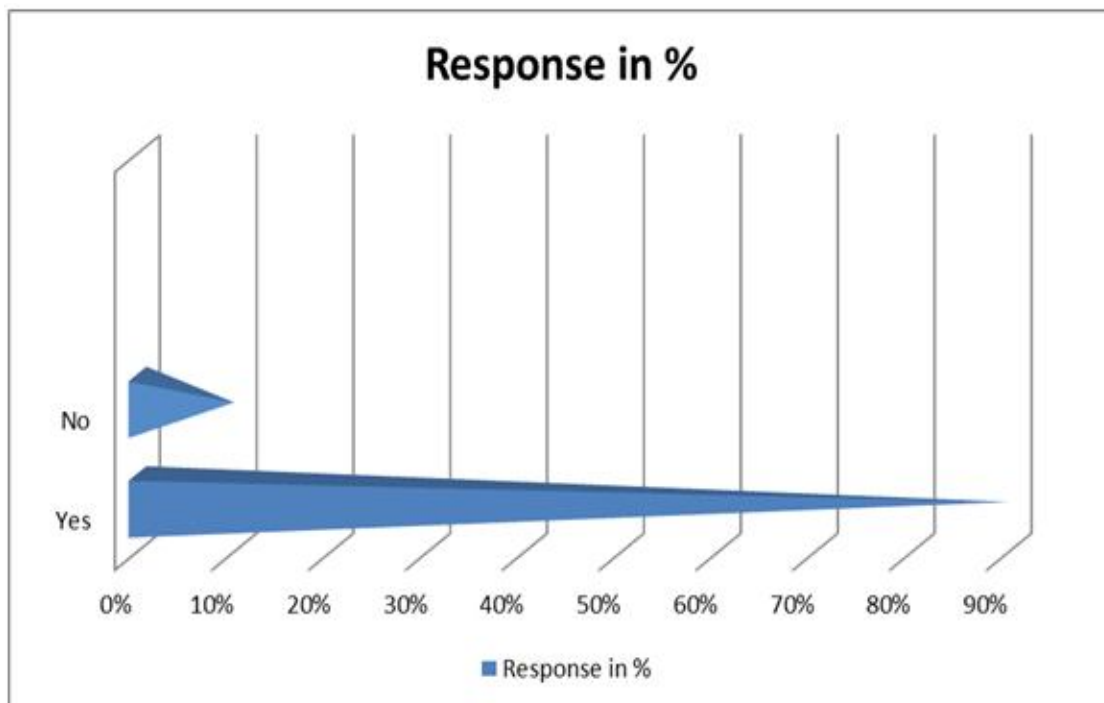
Response	Yes	No	Total
Number of Respondents	43	7	50
In Percentage (%)	85%	15%	100%



**Interpretation:** Mock Interview was conducted for the students. In order to evaluate the performance, video was taken during the interview. The videos were projected on the screen and suggestions were given for further improvement.

**5. Oral presentation using power-point slides.**

Response	Yes	No	Total
Number of Respondents	45	5	50
In Percentage (%)	90%	10%	100%

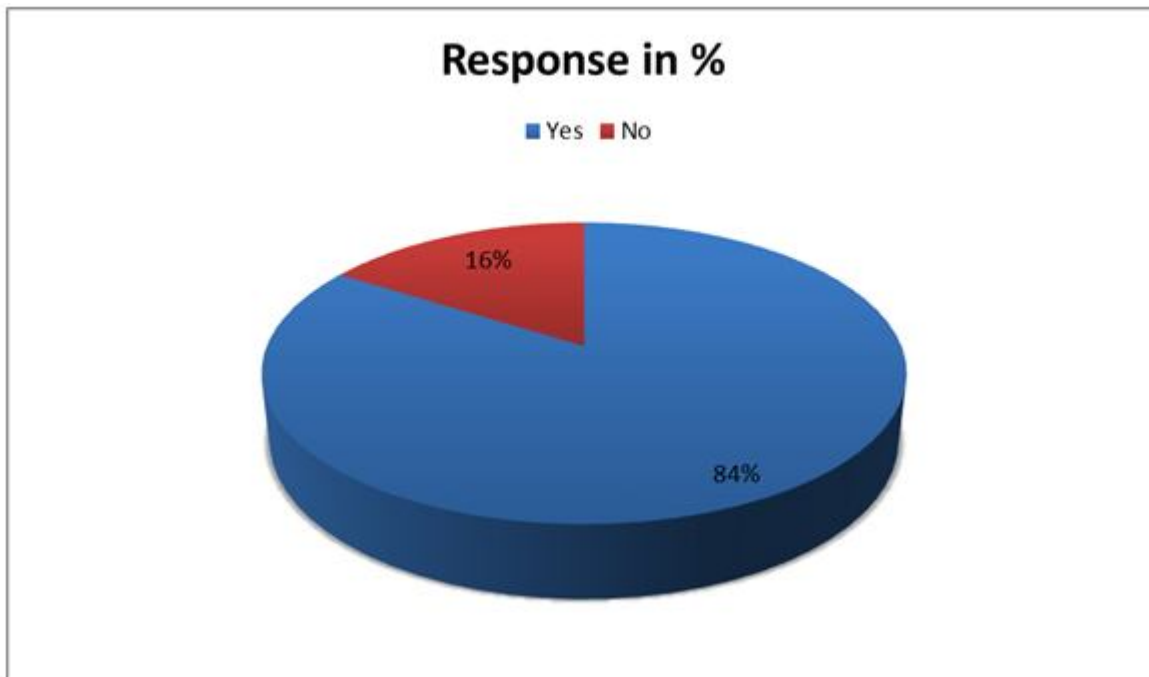


**Interpretation:** MBA Students gave Oral presentations using power-point presentations which creates confidence in them.

**6. Teachers asking to use internet (mobile) for learning English.**

Response	Yes	No	Total
Number of Respondents	42	8	50
In Percentage (%)	84%	16%	100%

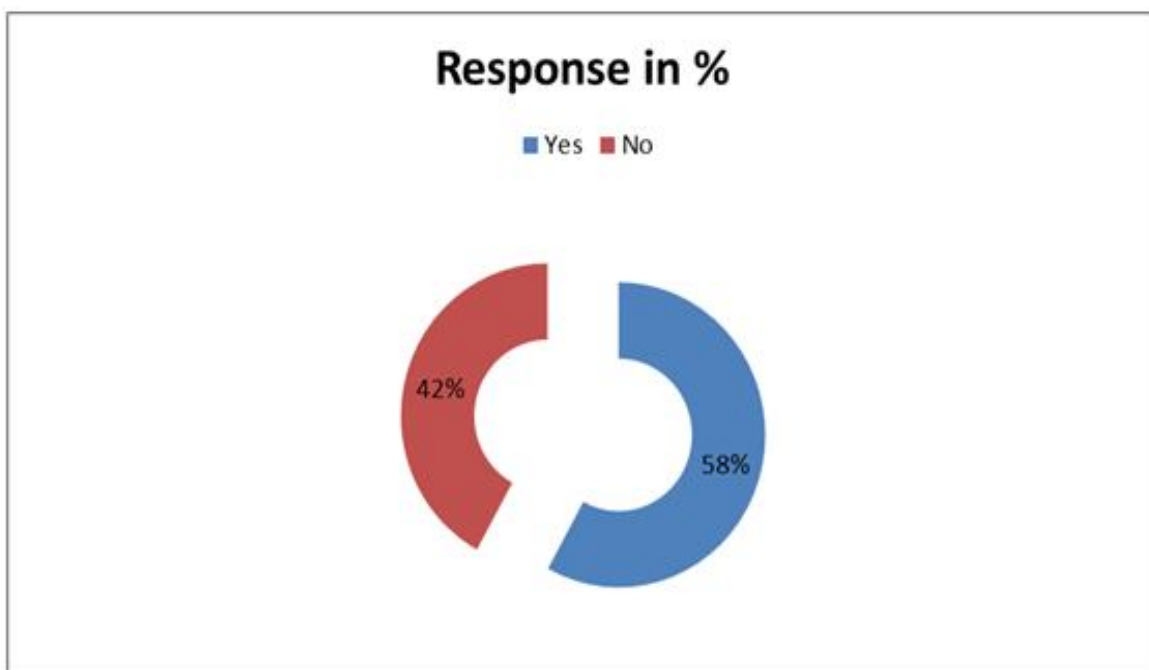




**Interpretation:** Internet (Mobile) is helpful for students to read online news, to know the meanings of words, pronunciation of new words, etc.

**7. Reading of English Newspaper every day.**

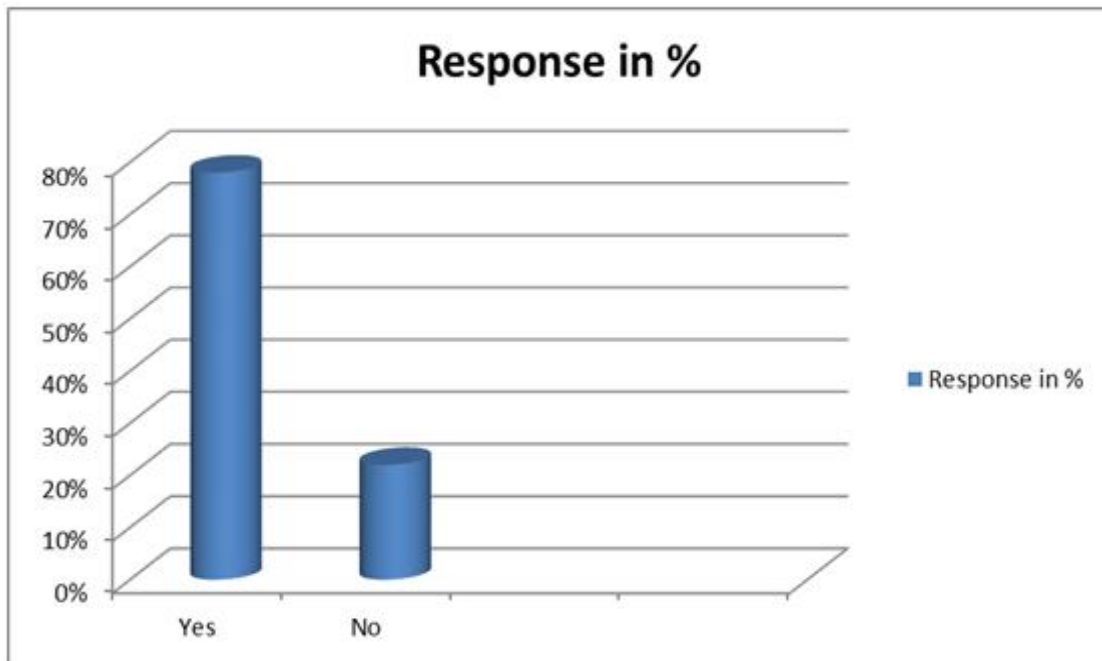
Response	Yes	No	Total
Number of Respondents	29	21	50
In Percentage (%)	58%	42%	100%



**Interpretation:** Few students do not have the habit of reading newspaper which creates gap in their knowledge and reading skills.

**8. Watching English movies in the classroom.**

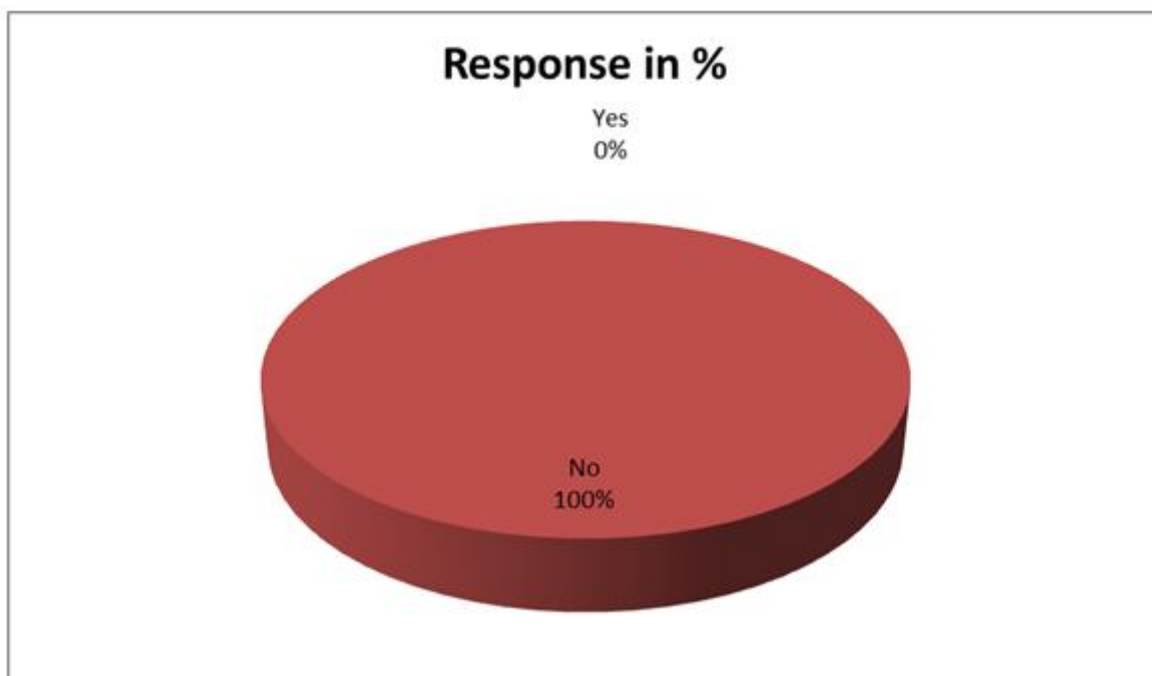
Response	Yes	No	Total
Number of Respondents	39	11	50
In Percentage (%)	78%	22%	100%



**Interpretation:** Students were shown “Pursuit of Happiness” (with English subtitles) which helps them to develop their listening skills.

**9. Language lab for learning English Communication.**

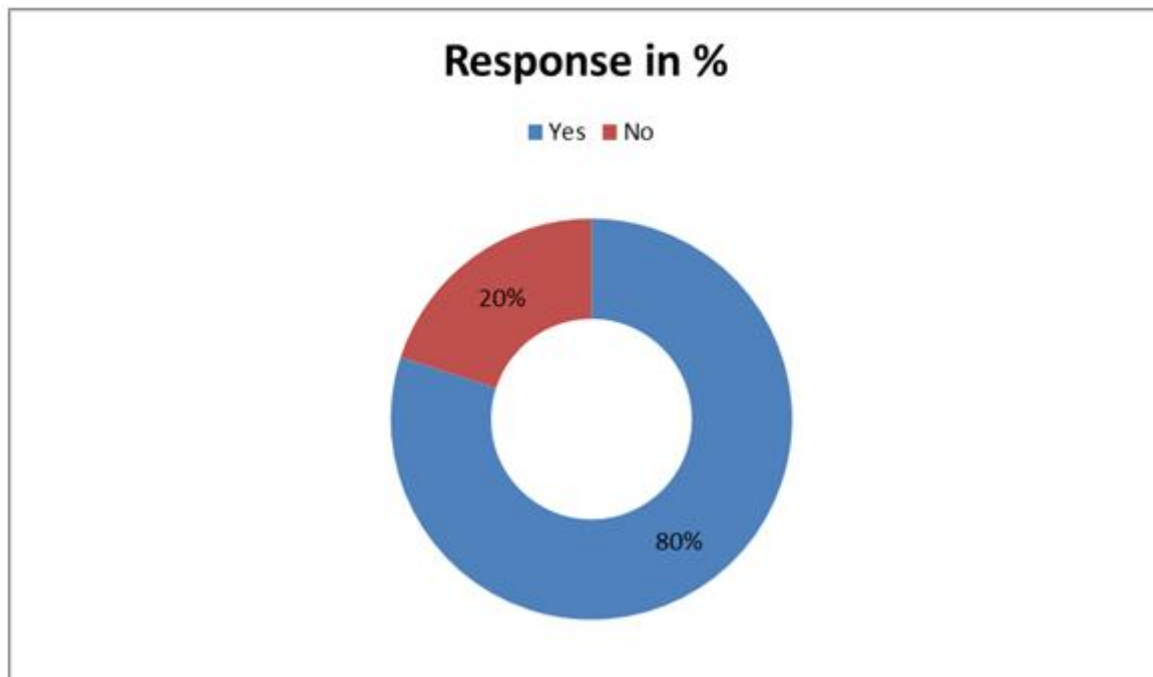
Response	Yes	No	Total
Number of Respondents	0	50	50
In Percentage (%)	0	100%	100%



**Interpretation:** There is no language lab for MBA students. Language lab should be installed for betterment of the students.

**10. Media and technology useful for effective communication in the classroom.**

Response	Yes	No	Total
Number of Respondents	40	10	50
In Percentage (%)	80%	20%	100%



**Interpretation:** Media and technology is very useful for effective communication because most of the conversation demands media as a tool for communication in the business scenario.

#### **FINDINGS AND CONCLUSION**

Media and technology indicates the future of business communication. MBA syllabi have an internal subject named Business Communication Lab. The syllabus designed by Savitribai Phule Pune University is 20% teaching oriented and 80% practical-oriented. It consists of presentation skills, debate, extempore speeches, drafting of business letters, email etiquettes etc. The teaching in the classroom is mostly practical-directed. Students are given guidance and lesson on various forms such as how to present your topic using power-point presentation, how to face an interview with applicable physical appearance, how to draft an email for business purpose, what rules need to followed during group discussion, etc.

Students are motivated to use power-point presentation while presenting their topics. During mock interview, debate and group discussions, videos are made so that students can observe their mistakes and good points which will boost their improvement. Teachers allow the students to use their internet (mobile) during lectures so that they can check the spellings, meaning and pronunciation of a particular word. This benefits them into learning and grasping faster. Email drafting is actually done by the students in the classroom. Online newspapers are read by students which can enhance their knowledge and also help to improve their reading skills and sentence structure. Students are also shown English movies sometimes in the classroom with the help of the projector and sound. This helps students develop their concentration and listening consciousness. Listening is the fundamental skills of communication. Before we can speak, we need to listen and understand first.

Speaking and performing in English has grown into the demand of business world. Business sphere demands basically few things from future professionals for their productivity and i.e. Soft skills and technical knowledge. MBA curriculum and teacher's innovative out of box thoughts can definitely make learning and practices smooth and accessible. Media and technology for learning and practices can be advantageous for students as it's more operated by the young generation. Learning becomes much easier than the traditional approach. Use of Media and technology will definitely boom the educational sector. Nowadays business has become more internet to internet. Physical mobility has decreased. Communication through internet is growing faster at 5G speed. That is reason why media and technology has become so undeniable factor for communication enhancement.

#### **SUGGESTIONS/RECOMMENDATIONS**

As media and technology has become the backbone of corporate universe, it should be given priority in every sector of disciplines. Education of the student and his/her personality development will be benefitted by the business universe. Students' education and his development depends upon the quality of education and training provided by the institutes and teachers. Institutes and teachers should use the latest technology in the classrooms

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for better schooling. Language lab software should be installed for MBA students. Teachers should be given proper training regarding language lab.

Students and teachers should be given free access to Wifi (internet) with 4G speed. Learning apps and online newspaper can be downloaded immediately whenever required in the classroom. Classroom should be digitalized following the footsteps of 'Digital India'.

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**A COMPARATIVE STUDY OF WORK-LIFE BALANCE BETWEEN MALE AND FEMALE EMPLOYEES AND ITS IMPACT ON JOB SATISFACTION IN IT COMPANIES IN PUNE CITY – A REVIEW OF LITERATURE**

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### **ABSTRACT**

*Two major studies have contended that work life balance is an important aspect for an employee and it has a bearing on job satisfaction. A 2014 survey by BCG of 200,000 employees worldwide found that WLB is the 3<sup>rd</sup> most influencing factor for job satisfaction. A 2010 meta-analysis published in British Psychology Society reviewed 223 studies which evaluated the link between job satisfaction and life satisfaction (subjective well-being). The psychologists concluded that people who are inclined to be happy and satisfied in personal life in general are more expected to be happy and satisfied in their work place. They mark that individuals who are generally not happy in personal life and explore satisfaction in their work likely will not find it.*

*In terms of Indian context, the concern over work-life balance is gradually becoming a frequent talk. When employees go back to their homes, they should not carry any kind of work related stress with them. An individual has two roles to play- personal and professional; each aspect having different set of requirement. When such role demands imbricate, numerous problems are faced leading to losses for all concerned: the individual, the family, the organization and the society. With the increasing levels of stress in the work place and the same time necessity to manage the household has given tremendous boost to the approach like work life balance (WLB). Earlier WLB was considered to be solely women's prerogative but a number of studies and surveys have nullified this gender biased perception of WLB. In fact now it is advised to be equally important for both males and females. Thus the aim of the research was to compare the Work Life Balance of both male and female employees working in IT companies and to see its job satisfaction of male and female employees in the IT companies in Pune city. Prior to the full-fledged study, a review of literature was done and this article presents the same.*

*Keywords: IT companies, Job satisfaction, Work-life balance*

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### **1. INTRODUCTION**

Literature on Work-life balance is widely available. Due to the huge amount of literature available on the subject it was a difficult task to select the appropriate literature for review. Hence as a practical approach the topics were sub-divided into the following categories –

- a. Work family conflict/work life balance studies
- b. Individual related variables and Work life balance/work family conflict
- c. Family related variables and Work life balance/work family conflict
- d. Work related variables and Work life balance/work family conflict
- e. Family and Work related variables and Work life balance / work family conflict
- f. Outcomes of work family conflict/work life balance
- g. Individuals' strategies for work life balance
- h. Organizations' strategies for work life balance
- i. Organizations' initiatives and programmes for work life balance

### **1.2 REVIEW OF LITERATURE**

#### **a. Work family conflict / work life balance Studies**

Researchers like Gutek et al. (1991), Frone et al. (1992a), Williams and Alliger (1994), Eagle et al. (1997), Frone et al. (1997), Hammer et al. (1997), Hsieh et al. (2005), Wesley and Muthuswamy (2005), Rajadhyaksha and Ramadoss (2010) and Kinnunen and Mauno (2007) have featured on assessing work family conflict among individuals in various settings and also identified the order of spillovers. Gutek et al. (1991) carried a study using two separate samples of employed people with families, a systematically selected sample of psychologists and a volunteer sample of managers. Their findings indicated that the two types of perceived work family

conflict (work interference with family and family interference with work) were clearly separable and relatively independent of each other. The people perceived less family interference with work than work interference with family. But, when Frone et al. (1997) developed and tested an integrative model of work family interface using a sample of 372 employed adults who were married and/or parents, their findings suggested the indirect reciprocal alliance between work to household (family) and family to work conflict. Family to work conflict was found to have implicit influence on work to family conflict via work distress and work overload. Work to family conflict had indirect influence on family to work conflict via increased parental overload. Rajadhyaksha and Ramadoss (2010) proved the model given by Frone et al. (1997) on a sample of 405 women in India and found that Indian data thinly supported within and cross domain relationship hypothesized in the model.

Hammer et al. (1997) compiled the data from around 400 dual-earner couples and found that work family conflict had strong crossover effects for both males and females, suggesting that individual's level of work family rivalry was a significant forecaster of their partner's level of work family conflict.

#### **b. Individual related variables and work life balance/work family conflict**

Studies by Gutek et al. (1991), Williams and Alliger (1994), Higgins et al. (1994), Loscoco (1997), Aryee et al. (1999b), Grzywacz et al. (2007), Rajadhyaksha and Velgach (2009) highlighted gender differences with respect to work family conflict. Gutek et al. (1991) suggested that women reported more work interference in family than men, despite spending about same number of hours in paid work as men. Even though women spent more hours in family work than men, they spelt out the same level of family interference in work. Williams and Alliger (1994) found that spillover of unpleasant moods occur both from work to family settings and from family to work even though evidence for the spillover of pleasant moods was weak. Both the spillovers - family to work and work to family, were stronger for women than men. Further, it was discovered that the extent to which work interfered with family for a given day was found to be positively related to self-reported job engagement for that day. Extent to which family interfered with work on a given day was found to be positively correlated to distress in family roles during the day, family intrusion into work during the day and self-supported family involvement for that day.

Rajadhyaksha and Velgach (2009) also concluded that women experienced significantly higher family interference with work as compared to men. But there were no significant differences between men and women in the experience of work interference with family.

#### **c. Family related variables and work life balance/ work family conflict**

Family related factors such as spouse support, spouse work hours, couple's employment status, number of children, parental responsibilities, home responsibilities have been studied in the context of work life balance/conflict. Suchet and Barling (1986) in their study of interrole competition, partner support and marital functioning concluded that support from one's husband may assist working mothers cope with their own interrole conflict, as husbands' supporting behavior and attitude might help in reducing the opposing role demands on, and unrealistic role expectations of employed mothers.

Loerch et al. (1989) scrutinized the relationships between family related variables and three sources of work family conflict (time, strain and behavior based) for both men and women. Family related variables examined included time based (number of children, spouse work hours per week, couple's employment status) strain based (conflict within family, spouse support, quality of experience in spouse or parent role) and behavior based antecedents, family intrusions (parental, marital, home responsibilities) and role involvement. The results suggested that the time based antecedents (number of children, spouse work hours, couple's employment status) were not significantly related to any form of work family conflict for men or women. Strain based antecedent, fights within family, was found to have a positive relationship with work family conflict. But, the negative relationship of other strain based antecedents (spouse support, quality of spouse and parental experiences) and work family conflict was not corroborated. The behavior based antecedent, role congruity, was not significantly related to any form of work family conflict. The variable of role involvement significantly forecasted only the time based conflict for men.

Adams et al. (1996) founded and tested a model of the relationship between work and family. The results concluded that higher levels of family emotional and instrumental support were associated with lower levels of family interfering with work. Frone et al. (1997) found that family related support (spouse & other family members) may reduce family to work conflict by reducing family distress and parental overload.

Higgins et al. (1994) and Frye and Breugh (2004) also researched work family conflict in the context of parental demands. Higgins et al. (1994) along with the finding that women experience greater work to family interference than men, also found that interference was highest when the children were of small age, and lowest

in families with older children. Also, women reported significantly higher levels of family interference with work than men in early years, but interference levels were comparable to men's in the third life cycle stage (i.e. children 10 to 18 years). Frye and Breugh (2004) reported that having child care responsibility was predictive of family- work conflict and showed a positive relation to such conflict.

#### **d. Work related variables and work life Balance /work family conflict**

Research by Greenhaus et al. (1989), Voydanoff (2004), Butler et al. (2005) found task autonomy to be correlated with work family conflict. Greenhaus et al. (1989) studied different types of work related pressures as sources of work family conflict among two career couples. The results showed that work role stressors (role conflict and role ambiguity) were a cause for a significant portion of the variance in time based and strain based conflict for both men and women. The task characteristics (autonomy and complexity) were found to be correlated with work family conflict and were somewhat stronger for women than for men. Work schedule characteristics were found to be by and large unrelated to work family conflict. Among women, it did not explain significant portion of difference in either time based or strain based conflict and among men, it was correlated to only strain based conflict.

Voydanoff (2004) applied a differential salience-comparable salience approach to examine the effects of work demands and resources on work to family conflict and facilitation. The data was collected from the 1997 National Study of Changing Workforce (NSCW) and consisted of 1,938 employed adults living with a family member. The model included within its domain work demands and resources and boundary spanning resources as sources of work to family conflict and facilitation. The findings showed that time based demands (work hours and extra work without notice) and strain based demands (job insecurity and time pressure) were positively associated with work to family conflict. It was found that enabling resources (autonomy and learning opportunities) and psychological rewards (respect and meaningful work) were positively correlated to work to family facilitation. These resources (except learning opportunities) displayed negative relation with work to family conflict. Time based family support policies (parental leave and time off for family) and work family organizational support (supportive work family culture and supervisor work family support) exhibited negative association with conflict, and positive relationship to work to family facilitation.

Mayo et al. (2008) concentrated on the effects of three forms of managerial work demands – time spent at work, travel and number of subordinates, on the involvement of both partners in household labor activities. They also checked the interactive effects of two organizational practices, time flexibility and task autonomy, with three forms of managerial workloads, to predict the division of household labor between spouses. It was discovered that as time demands increased, managers with low time flexibility contributed less than their spouses in household work than managers with high time flexibility. Additionally it was also found that as travel demands increased, managers with low task autonomy were less engaged than their spouses in household work than managers with high task autonomy. Thus, it appeared that high control and command over time and tasks could help achieve a good work family balance among managers.

#### **e. Family and work related variables and work life balance / work family conflict**

Some of the research studies carried by Pleck et al. (1980), Grzywacz and Marks (2000), Saltzstein et al. (2001), Frye and Breugh (2004), Luk and Shaffer (2005), Kinnunen, Aryee (1992) and Mauno (2007) scrutinized the interrelation among different family and work related matters and work life balance / work family conflict.

Pleck et al. (1980) in their survey study of workers found that substantial minority of workers living in families experienced conflict between work and family life. Parents reported more conflict than other couples. Peculiar working conditions, such as excessive hours at work, scheduling and physically or psychologically demanding were correlated with experiencing work family conflict, which in turn was related to diminished job satisfaction and contentment with life in general.

Kim and Ling (2001) researched the sources and types of work family conflict among 102 married Singapore women entrepreneurs. The characteristics studied included work hours, work schedule inflexibility, work stressors, number and age of children and family support. The variables studied included job satisfaction, life satisfaction and marital satisfaction. Results showed that number of hours worked, work stressors (role conflict and worries about financial health of business) and work schedule inflexibility were positively related to work-family conflict. Spouse emotional and attitude support was found to have a significant negative relation with work family conflict. The outcome variables job satisfaction, marital satisfaction and life satisfaction were found to be negatively associated with work-family conflict.

Kinnunen and Mauno (2007) studied the prevalence, antecedents and consequences of work family conflict. Family related variables (presence of children and employment status of spouse) mainly explained the family to

work conflict and explained 9% of variance for men and 22% for women. Work related variables (full time job, poor leadership relations and low levels of job security) were found to be the best predictors of work to family conflict, but only for women. Family to work conflict was found to have negative influence on family well-being, and work to family conflict on the well-being at home as well as at work.

Studies by Higgins and Duxbury (1992), Aryee et al. (1999a), Milkie and Peltola (1999), Keene and Quadagno (2004) and Grzywacz et al. (2007) suggested that antecedents may differ with spouse employment status, culture or gender. Higgins and Duxbury (1992) examined the variations in the antecedents and consequences of work family conflict - for two groups of career oriented men: those with a homemaker wife (137, traditional career men) and those with a spouse in a career oriented job (136, dual career men). It was concluded that maternal career employment status had a significant effect on the antecedents of work-family conflict. Dual career men felt greater work-family conflict due to conflict within the work horizon as compared to traditional career men. As the work environment did not provide the increased flexibility needed by dual career men to balance the increased role demands, these men were relatively less able to confront with work issues as compared to traditional career oriented men. But, the maternal career employment status was not found to have any impact on the extent to which work family conflict lowered quality of work life or quality of family life.

#### **f. Outcomes of work family conflict/ work life balance**

A number of researchers like Adams et al. (1996), Duxbury and Higgins (2001), Martins et al. (2002), Fisher-McAuley et al. (2003), Schieman et al. (2003), Ezzedeenand Swiercz (2002), Grzywacz and Bass (2003), Sandhu and Mehta (2006), Pal and Saksvik (2007), and Haar and Bardoel (2008) have suggested that work life balance /work family conflict impacts job satisfaction, family satisfaction, life satisfaction, career satisfaction and job stress.

Janssen et al. (2004) studied the mediating role of negative work household interference (NWI), in a study of 115 US and 260 Dutch nurses and nurse assistants to test a theoretically derived model of specific interrelation between work characteristics and two outcomes (i.e. emotional exhaustion and job satisfaction). The results in the Dutch sample revealed that emotional exhaustion was only related to psychological job demands and workplace social support. Job satisfaction was found to be correlated with job control and with workplace social support. In the US sample, similar associations were found. The results also showed that the association between psychological job demands and emotional exhaustion was partially mediated by NWI. NWI was more vividly correlated with the 'negative' outcome emotional exhaustion.

Sandhu and Mehta (2006) in a study of 271 women working in service sector in Punjab reported that gender role attitude and spillover between work and family roles was the most significant factor that impacted the career of these women. It was also revealed that nature of organization and education had a significant impact on work family conflict. Pal and Saksvik (2008) in a cross cultural study of 27 doctors and 328 nurses from Norway and 111 doctors and 136 nurses from India, found that predictors of job stress varied for doctors and nurses in India and Norway. In the case of Norwegian nurses, work family conflict was one of the key predictors of job stress while in the case of Indian nurses high family work conflict was one of the key predictors of job stress.

#### **g. Individuals' strategies for work life balance**

Individuals deploy strategies such as accommodation, negotiation to enhance their work life balance or reduce work family conflict. Singh (2001) in his qualitative study used 'work/life border theory' to study how British and Swedish managers dealt with competing commitments. A sample of 35 managers (18 Swedish, 17 British ; 18 males and 17 females) ranking from directors to project managers, aged between 28 to 59 years, was collected and semi-structured interviews were conducted on site in UK and Sweden. The study revealed a tension between managers' own needs for more balanced work lives and corporate attitudes to balance - seekers and career choices. Findings suggested that four different kinds of strategies were used by the managers for maintaining work life balance. These included accommodating family terms, negotiating with the family, accommodating the organization and staggering commitments. The study also found that managers enact their work life balance strategies with both their employer and their family, particularly their partner, who also enacts boundaries between home and employer, so there were four parties to the negotiation or accommodation of needs. Some managers use their own opinions as reference points for dealing with subordinates' need for work life balance.

Powell and Greenhaus (2006) studied how individuals dealt with incidences of work-family conflict that pose difficult choices for them. The study examined two interconnected processes: a) the actions that individuals take to avoid conflict in such incidents; and b) the choices they make when the conflict cannot be avoided. First, they



may endeavor to mobilize tangible support from a role sender in either the work or family domain to reschedule one of the activities. If they are successful, this strategy avoids work– family conflict by enabling individuals to participate fully in both activities. If however, support mobilization is unsuccessful or not attempted, individuals decide whether to participate partially in some combination of both activities or to participate solely in either the work or family activity. It was revealed that individuals use multiple cues in deciding how to respond to situations of potential work family conflict.

#### **h. Organizations’ strategies for work life balance**

Organizations employ strategies such as ‘separation’ and ‘integration’ as responses to non-work. Kirchmeyer (1995) identified three types of organizational reactions to non-work (separation, integration, respect) and used the data collected from 221 managers, active in multiple areas, to assess the effectiveness of these organizational responses. In the case of “integration” response, employers treated work and non-work as related worlds that impacted each other, and played their part to reduce the gap between them in an effort to help workers manage their multiple areas. The effectiveness of these responses was assessed in terms of their ability to reduce the negative spillover from non-work, and to enhance both organizational commitment and the positive side of spillover. Integration and respect indicates positive and conclusive correlations with organizational determination, whereas separation response showed a negative correlation. It was found that the type that enhanced the flexibility of the work- non work boundary and involved the employer in providing resources for workers to fulfill non-work responsibilities themselves proved most effective.

These three types of strategies applied by the employers can be depicted as under –



#### **i. Organizations’ initiatives and programmes for work life balance**

A variety of work life balance initiatives/ programmes have been undertaken by the organizations and various researchers like Kossek et al., 1994; Osterman, 1995 ; Thomas and Ganster, 1995; Milliken et al., 1998; Newman and Mathews, 1999; Maxwell and McDougall, 2004; and Doherty, 2004 have tried, to identify these programmes and to study rationale for provision of these programmes, benefits accruing to employees and organizations as a result of these programmes and hurdles in implementation of these programmes.

The organizations try a wide variety of work life arrangements to enhance the work life balance of employees. Kossek et al. (1994), Osterman, (1995), Galinsky and Johnson (1998), Kirchmeyer (1995), Konard and Mangel (2000), Guest (2002), Maxwell and McDougall (2004), Coughlan (2005), and Cieri et al. (2005) studied and identified different work life arrangements. Included in these were parental leave, paternity leave, maternity leave, adoption leave, sabbaticals, flexible work timings, job sharing, job splitting, flexi time, compressed working week, annual hours system, banking of hours, telecommuting, supervisory training in work family sensitivity, on site day care, emergency child care, elder care arrangements.

A number of studies have emphasized the reasons for the provision of work life balance programmes by various organizations. Kossek et al. (1994) endorsed three reasons for provision of employer sponsored child care. It was contended that child care problems interfering with work efficiency could be eliminated by provision of child care programmes and it improved management’s control over the workforce. Second reason was to follow the actions of other successful organizations and give a signal that the organization is progressive and cares about employees’ needs. And finally the third reason was the coercive pressures from the government or society.

### 1.3 OBSERVATIONS AND RESEARCH GAP

- Work to family conflict is more visible as compared to family to work conflict.
- No concrete conclusions can be drawn with respect to the gender differences in work life balance. Yet, on the basis of the studies which reported gender differences, it can be concluded that women experience more work family conflict.
- Emotional intelligence has been found to be positively associated with work life balance.
- The higher the importance given to work in life, the higher is the work family conflict.
- Spouse support has been found to be negatively associated with family to work conflict.
- Higher the parental demands, higher is the work family conflict.
- Job related factors (task autonomy and work schedule flexibility) have been found to be positively associated with work life balance.

### 1.4 CONCLUSION

The initial conception of the concept was in terms of work family conflict / work family balance. Work life balance concept has evolved recently, hence much research is focused on work family conflict instead of work life balance that is a much broader term and includes work and rest of the life (including family).

Further much emphasis has been laid on studying the outcomes of work family conflict or work life balance as compared to the antecedents especially in the context of work life balance. Again, the researchers who studied the antecedents, concentrated mainly on the work or family related variables; and have not taken into account individual related variables. Moreover there are hardly any studies to be found in the Indian context, and hence the issue of work life balance is wide open for research in India. Moreover, IT and ITES industry has not been studied specifically; and this industry has typical work demands which make it imperative to study the issue of work life balance in the context of this industry. The present research is pitched up in the light of these gaps.

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**EMPIRICAL ANALYSIS OF LOGISTICS WITH RESPECT TO E-COMMERCE****Awez Kadarkhan Pathan<sup>1</sup>, Omprakash Shivpuje<sup>2</sup> and Dr. Pankaj A Nandurkar<sup>3</sup>**Assistant Professor<sup>1,2</sup> and Associate Professor<sup>3</sup>, JSPM's Kautilya Institute of Management and Research, Pune**ABSTRACT**

The research work is implemented "Empirical Analysis of Logistics with respect to E-commerce" this topic was selected for study due to the increased use of E-Commerce sites by the people. The primary objective of this research is to identify the effectiveness of logistics channel, to identify the delays in distribution, problems faced in information technology, effectiveness of damage policy, and to identify the Unfavorable factors in delivery of goods. The data was collected through the feedback of employees from private Courier and Logistics Services firm. By analyzing the data following conclusion was inferred.

It was found that the maximum quantity of goods arriving at the branch is in the range of 1000-1200 per day and minimum quantity of goods is in the range of 600-800 per day it means that they have a good customer base and this is because of their quality of service. As per the respond, 18.5% of employees deliver the goods within 1hr. 22.2% of employees agreed that they deliver goods within 1hr to 2hr. 51.9% of employees replied as delivery of goods take place within 2hrs to 3hrs. 7.4% of employees replied the maximum time taken for delivery of goods as more than 3hrs. 41% of the employees agree that there is a delay in delivery of goods. 37% of employees say that sometimes there is delay in delivery of goods, whereas 7% disagrees with this statement. Very few percent of employees says that there is always issue related with IT. 59% of the employees saythat sometimes there is issue relatedwith IT. 30% of the employees say very rarely is issue related with IT. The company safely keeps the parcels which cannot be delivered to the customers, most of the employee's rate highly satisfied about the RTO policy of the company. Regarding unfavorable factors in delivery of goods the major hindrance are social factors which is 75%. Weather makes 15% of the factors and traffic makes only 11% of the hindrance.

Finally the whole research was carried out in a systematic way to reach the exact results. The whole research and findings was based on the objectives or the problem statement. However, the study had some limitations also such as lack of time, lack of data. But proper attention was made to carry out research in proper way and to make accurate conclusion which may beneficial for company to enhance their customer base.

*Keywords: Damage policy, Logistics Channel, Return to origin*

**1. INTRODUCTION**

Logistics represent a compilation of activities that ensures the availability of the right products in the right quantity to the right customers at the right time. Logistics activities present as the linkage between production and consumption and essentially provide a link between production and market locations or suppliers separated by distance and time. It requires edge on products or physical goods, people and information about goods and people. Different standards are added to a product at various stages of its life phase. Production and manufacturing adds value by converting the raw material or components into finished parts. Consign value is provided through transportation by moving the product where it is required. Time value is provided through storeroom and inventory control ensuring the accessibility of the product when needed. Ownership value is added to the manufactured goods through sales and marketing. Consign and time values are added by some of the key logistics function. In times of war supplying troops with the proper equipment and supplies was a logistics function as it is also known as military. Logistics has evolved since the 1950s with the increase of consumerism and subsequent growth of more difficult supply chains. Coordinating the movement of provisions and materials is now a globalized process. Today, the business sector uses logistics as a term to describe the resourceful flow and storage of goods from point of source to the point of consumption. The supply chain is a very important part of this process. A correct supply chain may include: shipping, transportation, receiving, storage, and management of all or one of these functions. Logistics may also apply to information, transportation, inventory, warehousing, material management, packaging, dumping, and safety within the business division.

**2. OBJECTIVES OF THE STUDY**

1. To identify the effectiveness in logistics channel
2. To identify delays in distribution channel, and the corresponding reasons.
3. To identify problems with reference to the Information Technology.

4. To identify the effectiveness of damage policy of the company.

5. To identify the Unfavorable factors in delivery of goods.

**3. RESEARCH METHODOLOGY**

**DATA COLLECTION**

The necessary information and data was collected as follows:

**a) Primary Sources**

The primary data are those which are collected for the first time and thus happened to be original in character. For this research primary data is collected by means of questionnaire. Following are the data collected from primary source i.e. Discussion with authorities.

- Interviewing

➤ The data are collected from the officials in the Regional Office.

➤ for the process of interviewing I have used the questionnaires for data collection

**b) Secondary Sources**

Secondary data may be defined as data that has been collected earlier for some purpose other than the purpose of the present study. Any data that is available prior to the commencement of the research project is secondary data.

- News papers
- Websites

**NATURE OF RESEARCH**

**Quantitative Research**

This research is based on numeric figures or numbers. Quantitative research aims to measure the quantity or amount and compares it with past records and tries to project for future period. In social sciences the objective of quantitative research is to develop and employ mathematical models, theories or hypothesis pertaining to phenomena.

The process of measurement is central to quantitative research because it provides fundamental connection between empirical observation and mathematical expression of quantitative relationships. Statistics is the most widely used branch of mathematics in quantitative research. Statistical methods are used extensively with in fields such as economics and commerce.

**Sampling Design**

**Sampling Technique Employed**

For the Research **Convenience Sampling Technique** was used.

A process used in statistical analysis in which a predetermined number of observations will be taken from a larger population. The methodology used to sample from a larger population will depend on the type of analysis being performed, but will include simple random sampling, systematic sampling and observational sampling.

**Sample Respondents**

The Sample Respondents were the workers and supervisors in Logistics Company Sample Size:

Sample Size for the Research of Sample size was 27.

**Tools Used For Analysis**

Statistical tools like Pie Chart Graphs, Diagrams were used for the purpose of Analysis of data.

**4. DATA ANALYSIS AND INTERPRETATION**

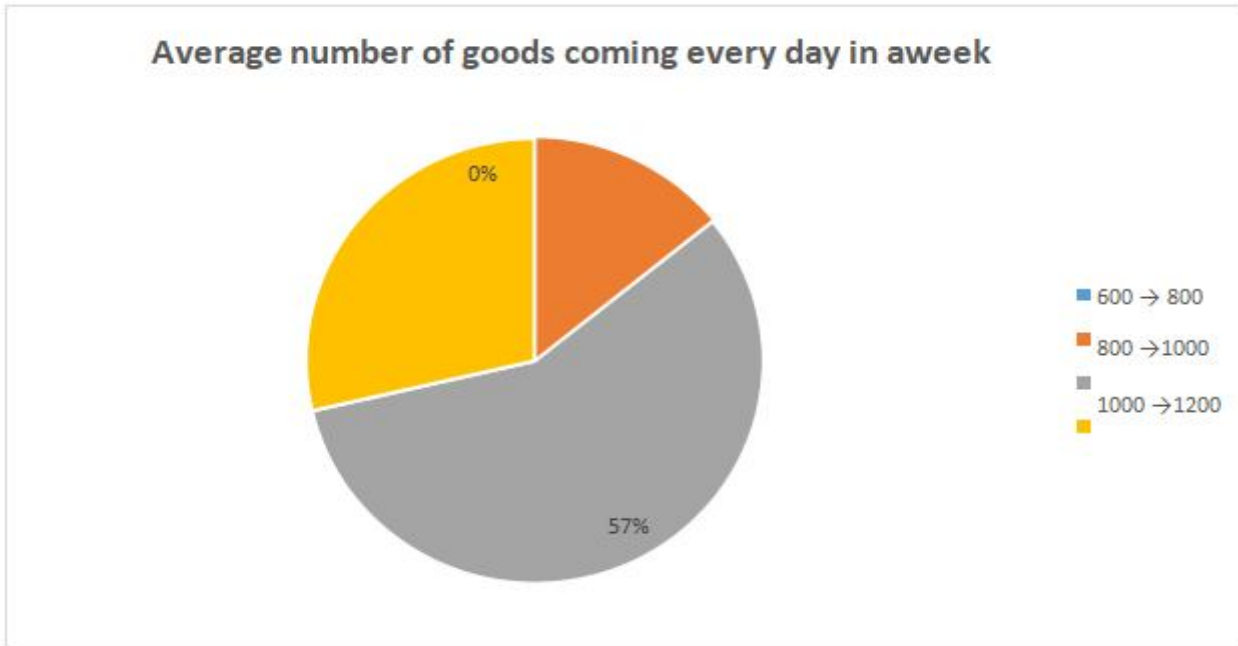
**1. Average Number of goods coming every day in a week**

**Table No-4.1**

Number of goods	Days in a Week	Percentage
600 → 800	0	0%
800 → 1000	1	14.2%
1000 → 1200	4	57.2%
1200 → 1400	2	28.6%
Total	7	100%



Chart No: - 4.1



**Interpretation**

The above graph shows the average number of goods arrives at the branch every day in a week. According to this graph maximum number of goods catered by the branch ranges from 1000 –1200 per day and minimum number of goods is 600 – 800 per day

**2. Delay in delivery of goods**

Table No: - 4.2

Responds	No. of Respondents	Percentage
Always	11	40.7%
Sometimes	10	37.1%
Rarely	4	14.8%
Never	2	7.4%
Total	27	100%

Chart No: - 4.2



**Interpretation**

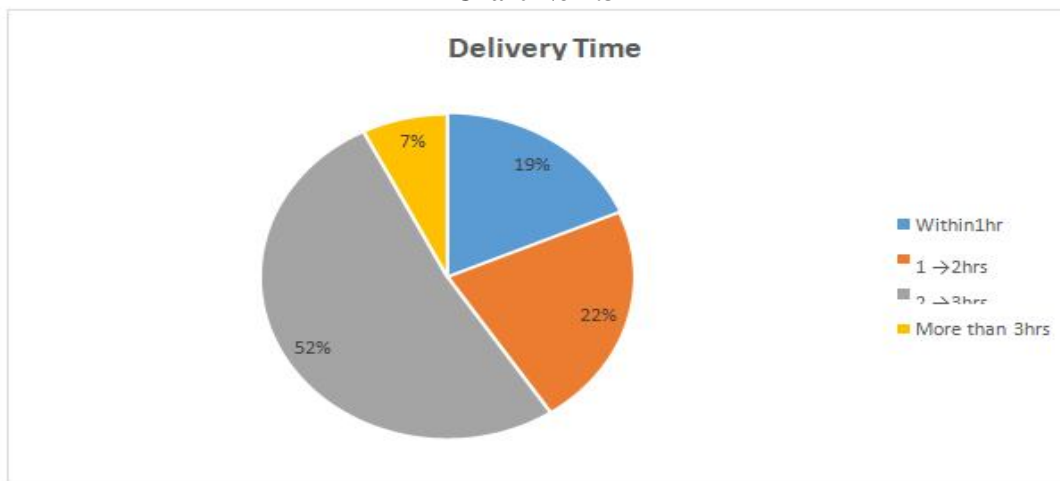
The above graph shows the status of delay in delivery of goods.41% of the employees agree that there is a delay in delivery of goods. 37% of employees say that sometimes there is delay in delivery of goods.7% disagrees with the statement.

**3. Maximum time taken for delivering agood**

**Table No-4.3**

Delivery time	Responds	Percentage
Within 1hr	5	18.5%
1 → 2	6	22.2%
2 → 3	14	51.9%
More than 3hrs	2	7.4%
Total	27	100%

**Chart No-4.3**



**Interpretation**

The above graph shows the maximum time taken for delivering goods.

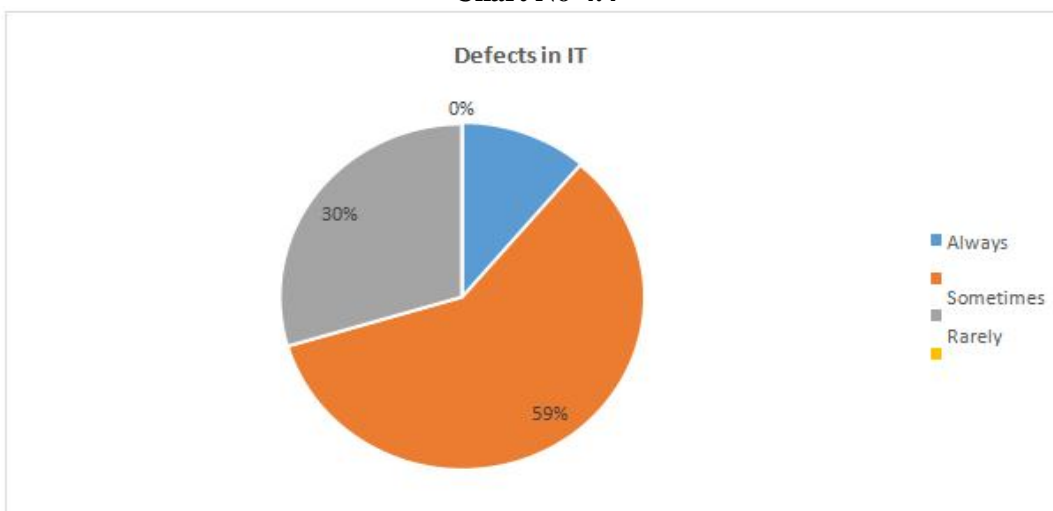
As per the responds, 18.5% of employees deliver the goods within 1hr. 22.2% of employees agreed that they deliver goods within 1hr to 2hr. 51.9% of employees replied as delivery of goods takes place within 2hrs to 3hrs. 7.4% of employees replied that maximum time taken for delivery of goods as More than 3hrs.

**4. Issues related to Information Technology/ software**

**Table No-4.4**

Responds	No. of Respondents	Percentage
Always	3	11.2%
Sometimes	16	59.2%
Rarely	8	29.6%
Never	0	0%
Total	27	100%

**Chart No-4.4**



**Interpretation**

The above graph shows the status of defects in IT.

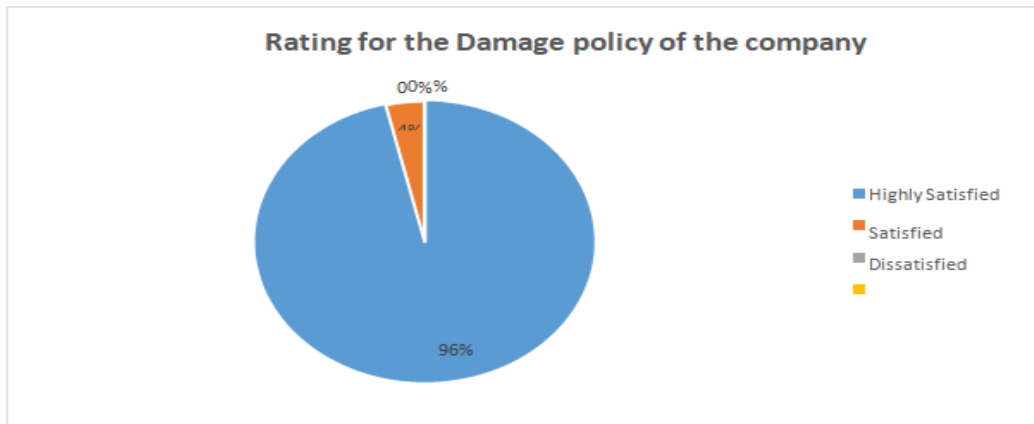
59% of the employees say that sometimes there are defects in IT. 30% of the employees say very rarely defects occur in IT. Very few percent of employees says that there are always defects in IT system.

**5. Rating for the Damage policy of the company.**

**Table No-4.5**

<b>Responds</b>	<b>No. of Respondent</b>	<b>Percentage</b>
Highly Satisfied	26	96.3%
Satisfied	1	3.7%
Dissatisfied	0	0%
Highly Dissatisfied	0	0%
Total	27	100%

**Chart No-4.5**



**Interpretation**

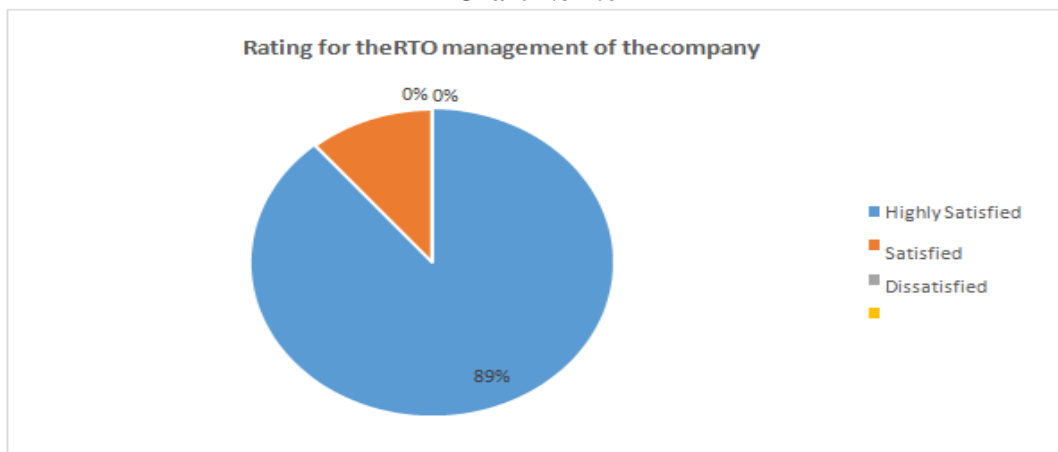
The above graph shows the rating in the damage policy of the company by the employees. 96% of the employees are highly satisfied by the damage policy of the company and 4% of the employees are just satisfied by the damage policy.

**6. Rating in RTO (Return to Origin) management of the company.**

**Table No-4.6**

<b>Responds</b>	<b>No. of Respondent</b>	<b>Percentage</b>
Highly Satisfied	24	88.8%
Satisfied	3	11.2%
Dissatisfied	0	0%
Highly Dissatisfied	0	0%
Total	27	100%

**Chart No-4.6**



**Interpretation**

The above graph shows the rating RTO management of the company by the employees.

The company safely keeps the parcels which cannot be delivered to the customers.

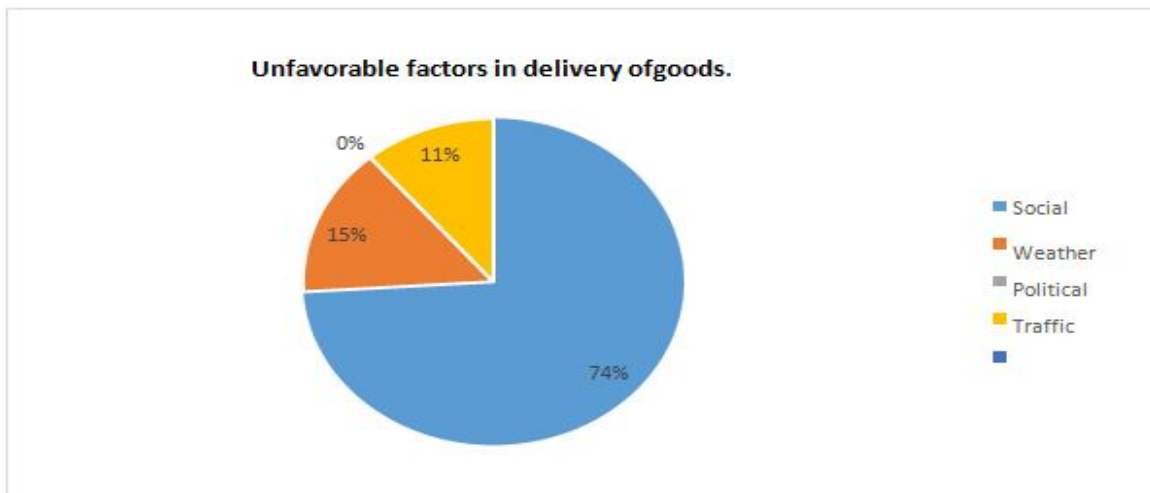
89% of the employees are highly satisfied about the RTO policy of the company and the rest 11 % are satisfied about the RTO policy.

**7. Unfavorable factors in delivery of goods.**

**Table No-4.7**

<b>Responds</b>	<b>No. of Respondent</b>	<b>Percentage</b>
Social	20	74%
Weather	4	14.8%
Political	0	0%
Traffic	3	11.2%
Government	0	0%
Total	27	100%

**Chart No-4.7**



**Interpretation**

The above pie chart shows the unfavorable factors in delivery of goods.

Major hindrance in delivery of goods is social factors which is 75%. Weather makes only 15% of the factors and traffic makes only 11% of the hindrance.

**5. CONCLUSION**

After analyzing all the aspects of the data available and giving some important conclusion which should be derived for this study. However before starting the conclusion part, the objective of the study must be kept in mind so that we can arrive at a befitting conclusion for the research problem. The primary objective of this research is to identify the effectiveness in logistics channel and to identify the delays, problems in information technology, effectiveness of damage policy, and to identify the Uncomfortable factors in distribution channel.

Where I found that the companies’ logistics channel is working very effectively and the customers are totally satisfied with their services provided by the company, The Company has very effective operation management system and all workers and customers are satisfied and they are enjoying the environment and also work in a way to achieve organizational goals.

I also found that the maximum number of goods catered by the branch ranges from 1000-1200 per day and minimum number of goods range were 600-800 per day it means that they are receiving very well range of goods it’s because of their quality service. The company safely keeps the parcels which cannot be delivered to the customers most of the employees are highly satisfied about the RTO policy of the company.

It is very important to develop a good relationship with the retailers by providing them better services and schemes. Maintaining good relationship with the distributors is very important for the company because they are the main part of the distribution channel.

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Finally the whole research was carried out in a systematic way to reach at exact results. The whole research and findings were based on the objectives. However, the study had some limitations also such as lack of time, lack of data. But proper attention was made to carry out research in proper way and to make accurate conclusion which may be beneficial for company to enhance their customer base.

**6. REFERENCE**

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**WEBSITES**

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2. <http://www.firstflight.com>
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