A Research on Measurement of Employee Satisfaction with special reference to Call Center Industry in Pune

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Abstract:

This research work has been carried out to measure the satisfaction level of employees with special reference to Call Center Employees. In today competitive era to retain the competent employees is the challenge to the organization who contributes towards the organizational goals and satisfying the customers as well. Many researches have been carried out in this area but the collective emphasis is not given before to the employees who are working in the different call centers. We conducted this research base on convenience sampling with 150 employees as sample size. To collect the data for the research we use structured questionnaire method on Likert five point scale for different variable which are major in nature which were condensed to five factors they are Salary and Future Prospects, Empowerment and Working Environment, Relations at Workplace, Training & Work Involvement and Job Rotation. In the research we study the employee satisfaction base on the above factors only. For the purpose of date analysis IBM SPSS is used. The data was reduced by performing Factor analysis and non parametric test as Kruskal-Wallis and Mann Whitney Rank test. To view employee satisfaction level against each variable (major) Chi-Square test were performed. In the research we also come across the other factors which influence the employee satisfaction they are: clarity in the role, freedom to make decisions, recognition at work, welfare measures, innovativeness and creativeness of employees.

Key words: *Role clarity, Job Satisfaction, Job rotation and Empowerment.*

I. Introduction & Literature Review

Well-being of Employees and their satisfaction level along with their engagement has observed the direct impact on the performance and success organization. It is obvious that higher level of employee satisfaction leads to lower employee turnover and vis-à-vis. It is because dissatisfied employees tend to perform lower than their capabilities which results in high turnover that is they leave their jobs relatively quickly, and they stop to recommend your company as an employer. Whereas satisfied employees tend to contribute more to the Organizational productivity and they has commitment towards customer satisfaction. Earlier surveys related to Employee satisfaction give employees a chance to raise a voice and allows them to pinpoint on the problematic areas, leading to raising satisfaction levels, developing and reviewing of Employee management and optimizing corporate communications. The Present Research is done in the similar field with special reference to Call Center Industry in Pune. Earlier also many more surveys had been done on the same topics but in different industries and organizations.

Dr. R. Anitha studied the Job Satisfaction of Paper Mill Employees in the year Sept. 2011 with Special Reference to Udumalpet and Palani Taluk. Dr. R. Anitha studied the Satisfaction level of the employees was measured on the basis of employee's welfare measures, working conditions, rewards & job security.

Employee Satisfaction in Small and Medium Sized Enterprises measured by Halil Zaim, Selim Zaim using factors such as payment, benefits, working environment, superiors and peers. In this survey questions relating to employee satisfaction and loyalty was covered in the first part where as in the second part of the survey a single question regarding employee's overall evaluation of organization loyalty was asked. Each and every item related to employee satisfaction context and employee loyalty was rated on a five-point scale, ranging from "very low" to "very high". The sample was selected randomly from the database of

Turkish Small Business Administration (KOSGEB). The study conducted on the textile industry, textile mill products and apparel. Here the findings established the positive linear relationship between five factors of employee satisfaction and employee loyalty. Among these factors, pay and benefits was found to be the top priority criterion followed by management and working environment.

Job Satisfaction further studied by Brikend Aziri (2011), and found that Job satisfaction is influence by the series of factors such as: The nature of work, Work conditions, Salary, Advancement opportunities and Work groups. It is the major challenges for today's organization. Job satisfaction is a combination of positive or negative feelings that workers have towards their work. When a worker employed in a business organization, brings with it the needs, desires and experiences which determinates expectations that he has dismissed. Job satisfaction is closely linked to that individual's behavior in the work place (Davis et al., 1985). Job satisfaction is considered as worker's sense of achievement and success. It is generally linked to productivity as well. Job satisfaction implies doing a job that one enjoys, doing it well enough and being rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's efforts put at work. In the year 2007 Kaliski come across the fact that Job satisfaction is the key ingredient that leads to recognition, income, promotion, and the achievement of other goals that lead to a feeling of fulfillment. In the year 2012 M. L. Meena and G. S. Dangayach conducted a study on Satisfaction in Banking Sector. The objective was to analyze employee satisfaction of Private Sector Banks and Public Sector Banks situated in Rajasthan namely (State Bank of India, Bank of Baroda, and Punjab National Bank as public sector banks) and (ICICI Bank and HDFC Bank private sector banks). Sample size was three hundred fifteen employees and it was found that satisfied employees made positive contributions to the organizational effectiveness and performance. In all the above research, Researchers have found that employee satisfaction plays a vital role in Organisational growth. Income, promotion, feeling of fulfillment, work environment, relations with superior etc. forms the part of employee satisfaction. In our research we have included these variables but two more factors also included by us they were Job Rotation and Employee Empowerment. In our research 23 variables used to measure the satisfaction level of employees.

II. Research Methodology

Hypothesis:

$H_0$1: Call Center Employees are satisfied in their respective Organization.

$H_0$2: Call Center Employees satisfaction does not differ with respect to Experience and salary.

$H_0$3: Call Center Employees satisfaction does not differ with respect to age Groups and training opportunities.

$H_0$4: There is no difference of satisfaction between the gender groups regarding job rotation in the Call Center.

Research Design: To study the Phenomenon descriptive research has been applied also known as statistical research, which describes data and characteristics about the population.

Sources of Data: Primary Data (self constructed structured Questionnaire) and Secondary Data (web sites, journals etc.).

Data Collection Tool: Close ended structured questionnaire was prepared and distributed among the employees of the different Call Centers on distinct 23 parameters like: salary, job rotation, work environment welfare measures at the organization etc. measured on Likert five point scales, which were later reduced to 5 factors with help of factor analysis.

Sampling Method: Under the probabilistic sampling techniques, Simple Random Convenience Sampling Technique was used.

Sample Size: Sample sizes of 150 employees from different Call Centers and from various departments were taken for the research purpose.

Statistcal Tools: We have used IBM SPSS 20 (Statistical Package for the Social Sciences), for data analysis.

III. Data Analysis & Data Interpretation

Factor Analysis Data reduction technique was used to find out major factors contributing towards the employee satisfaction.

Table - 1		
Kaiser-Meyer-Olkin Test and Bartlett's Test of Sphericity		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.90
Bartlett's Test of Sphericity	Approx. Chi-Square	1633
	Df	253
	sig	0

From table 1 it was observed that factor analysis was successfully conducted as the calculated value for Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.90) which was more than (0.6) and Bartlett's Test of Sphericity has sig value is (0) zero which was less than 0.05 at 5 % level of significance.

Table 2					
Rotated Component Matrix					
Factors	1	2	3	4	5
Respect from superiors	0.66				
Authority for performing duties	0.76				
Fair treatment	0.52				
Working hours	0.65				
Managers support	0.51				
Recognition at work place	0.53				
Decision making freedom	0.52				
Guidance by manager		0.63			
Mistakes treated positively		0.68			
Teamwork atmosphere		0.73			
Discussion on personal issues		0.63			
Considered suggestions		0.63			
Role informed very well		0.54			
Opportunities for further study			0.55		
Better career prospects			0.65		
Salary to the satisfaction			0.85		
Welfare facilities			0 .75		
Appreciation for creativity & innovative Ideas			0.58		
Potential utilized				0.51	
Opportunities available for training				0.53	
Involvement in managerial decision				0.70	
Work division in correct manner				0.68	
Job rotation					0.82

From the Table 2 we found five components for 23 variables which were studying. Based on the item loadings, these factors were respectively labeled as:

1. The factor "Employee Empowerment and Work Environment" explains the First component.
2. The factor "working Relationship" explains the Second component.
3. The factor "Future Prospects and Salary" explains the Third component.
4. The factor "Employee Training & Work Involvement" explains the Fourth component.
5. The factor "Job Rotation" explains the Fifth component.

Here researcher observed a few factors that contribute to the employee satisfaction, does not have much influence in employee satisfaction in Call Centers at Pune they were: clarity in role, welfare measures, recognition at workplace, and freedom of decision making, innovativeness and creativeness.
According to Table 3 all the above factors were capable of explaining 61.110% of variance.

Table 3
Explained Total Variance

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.565	15.989	15.979
2	3.552	15.432	31.321
3	2.679	12.215	43.436
4	2.435	10.986	54.322
5	1.458	6.988	61.110

Tests of a Goodness of Fit or Test of Normality (i.e. Data is Normally Distributed or not)
H_0: Distribution of sample data is normal. H_1: Distribution of sample data is not normal.

Researcher found that Kolmogorov-Smirnov test of normality had the sig. value for all the variables under consideration computed value less than 0.05 at 5% level of significance. Thus we failed to accept the null hypothesis. So we went ahead for non parametric tests.

Table 4

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Fair treatment	0.374	150	0	0.899	150	0
authority for performing duties	0.351	150	0	0.954	150	0
Managers support	0.423	150	0	0.652	150	0
opportunities available for training	0.295	150	0	0.787	150	0
Potential Utilized	0.216	150	0	0.816	150	0
respect from superiors	0.315	150	0	0.789	150	0
recognition at work place	0.382	150	0	0.894	150	0
Appreciation for creativity & innovative Ideas	0.471	150	0	0.839	150	0
discussion on personal issues	0.358	150	0	0.862	150	0
job rotation	0.294	150	0	0.825	150	0
salary to the satisfaction	0.258	150	0	0.682	150	0
welfare facilities	0.289	150	0	0.752	150	0
better career prospects	0.398	150	0	0.785	150	0
decision making freedom	0.219	150	0	0.897	150	0
mistakes treated positively	0.224	150	0	0.877	150	0
considered suggestions	0.353	150	0	0.767	150	0
work division in correct manner	0.344	150	0	0.888	150	0

involvement in managerial decision	0.265	150	0	0.897	150	0
guidance by manager	0.436	150	0	0.795	150	0
role informed very well	0.253	150	0	0.873	150	0
opportunities for further study	0.268	150	0	0.867	150	0
working hours	0.304	150	0	0.805	150	0
teamwork atmosphere	0.407	150	0	0.782	150	0

As the test of normality is conducted in the research and the result were explained in Table 4.

Use of Chi-Square Test for measuring level of Employee Satisfaction:

H_0: Call Center Employees are not satisfied in their respective Organization.

H_1: Call Center employees are satisfied in their respective Organization.

Empowerment & Work Environment is the first factor which includes authority for performing duties, respect from superiors, working hours, Managers support.

Chi-Square test statistics for Factor One (1)

Table 5

	Manager s Support	Authority For Performing Duties	Treated Fairly	Respect From Superiors	Working Hours	Recogniti on At Work Place	Decision Making Freedom
Chi-Square	137.23a	105.32a	128.05a	169.12a	112.56a	125.34a	127.81
Df	4	4	4	4	4	4	4
Asymp. Sig.	0	0	0	0	0	0	0

Table 5 gives the researcher analysis related to the entire variable under factor One (1) which had a significance value which is less than 0.05 at 5% level of significance, thus we are unable to accept the null hypothesis. As the null hypothesis rejected therefore we could say that Call Center employees are satisfied within their respective organization.

Chi-Square test statistics for Factor Two (2)

Table 6

	Guidance by manager	Mistakes treated positively	Teamwork atmosphere	Discussion on personal issues	Considered suggestions	Role informed very well
Chi-Square	162.92a	147.67a	134.96a	121.80a	163.67a	120.45a
Df	4	4	4	4	4	4
Asymp. Sig.	0	0	0	0	0	0

Table 6 gives the researcher analysis related to all the variables under factor Two (2) which had a significance value less than 0.05 at 5% level of significance, thus we are unable to accept the null hypothesis. As the null hypothesis is rejected therefore we could say that Call Center employees are satisfied within their respective organization.

Chi-Square test statistics for Factor Three (3)					
Table 7					
	Opportunities for further study	Better career prospects	Salary to the satisfaction	Welfare facilities	Appreciation for creativity & innovative Ideas
Chi-Square	63.12a	112.82a	118.96a	114.26a	67.39a
Df	4	4	4	4	4
Asymp. Sig.	0	0	0	0	0

Table 7 gives the researcher analysis related to all the variables under factor Three (3) which had a significance value less than 0.05 at 5% level of significance, thus we are unable to accept the null hypothesis. As the null hypothesis is rejected therefore we could say that Call Center employees are satisfied within their respective organization.

Chi-Square test statistics for Factor Four (4)				
Table 8				
	Potential utilized	Opportunities available for training	Involvement in managerial decision	Work division in correct manner
	0.51	0.53	0.7	0.68
Chi-Square	113.97a	63.01a	51.27a	49.97a
Df	4	4	4	4
Asymp. Sig.	0	0	0	0

Table 8 gives the researcher analysis related to all the variables under factor Four (4) which had a significance value less than 0.05 at 5% level of significance, thus we are unable to accept the null hypothesis. As the null hypothesis is rejected therefore we could say that Call Center employees are satisfied within their respective organization.

Chi-Square test statistics for Factor 5	
Table 9	
	job rotation
Chi-Square	95.667a
Df	4
Asymp. Sig.	0

Table 9 gives the researcher analysis related to all the variables under factor Five (5) which had a significance value less than 0.05 at 5% level of significance, thus we are unable to accept the null hypothesis. As the null hypothesis is rejected therefore we could say that Call Center employees are satisfied within their respective organization.

Extended Objectives for knowing employee satisfaction level on the basis of following test:

1. Employee satisfaction does not differ with respect to Experience and salary.
2. Employee satisfaction does not differ with respect to age Groups and training opportunities.
3. There is no difference of satisfaction between the gender groups regarding job rotation.

Kruskal-Wallis Test - 1

H_0: Call Center Employees satisfaction does not differ with respect to Experience and salary.

H_1: Call Center Employees satisfaction does differ with respect to Experience and salary.

Test Statistics Table 10	
Test Statistics a, b	
	satisfactory salary
Chi-Square	17.65
Df	3
Asymp. Sig.	0.001
a. Kruskal Wallis Test	
b. Grouping Variable: experience	

Table 10 show that the asymptopic sig. value is 0.001 which is < 0.05, at 5% level of significance. Hence we reject the null hypothesis. This shows that the satisfaction level of call center employees regarding their salary differ with respect to their experience. Therefore further research needed to know that how much employee differ on their satisfaction level when their salary fixed on the basis of their experience. For the further research prepared preferred rank table and from table 11 researcher concluded that call center employees having experience between 21 to 35 had the highest mean rank of 80.43, they were the ones who agreed to the salary they received. The Call Center employees having experience less than 5 years were not satisfied with the salary they withdrew, because their mean rank was lowest at 49.37.

Rank			
Table 11			
	experience	N	Mean Rank
satisfactory salary	Less than 5 years	31	48.97
	5 to 20 years	28	77.92
	21 to 35 years	85	80.43
	More than 35 years	6	70.15
	Total	150	

Kruskal-Wallis Test – 2

H_0: Call Center Employees satisfaction does not differ with respect to age Groups and training opportunities.

H_1: Call Center Employees satisfaction does differ with respect to age Groups and training opportunities.

Test Statistics a, b	
Table 12	
	Training Opportunities
Chi-Square	8.177
Df	4
Asymp. Sig.	0.085
a. Kruskal Wallis Test	
b. Grouping Variable: age	

On the basis of table 12 researchers found that the asymptopic sig value was 0.085 which was greater than 0.05 at 5% level of significance. Hence we failed to reject the null hypothesis. Researcher concluded

that irrespective of their age groups, call center employees were satisfied with the training opportunities offered by their organizations.

Mann-Whitney Test

H_0: There is no difference of satisfaction between the gender groups regarding job rotation in their Call Center.

H_1: There is difference of satisfaction between the gender groups regarding job rotation in their Call Center.

Test Statistics a	
Table 13	
	job rotation
Mann-Whitney U	338.5
Wilcox on W	366.5
Z	-1.545
Asymp. Sig. (2-tailed)	0.122
a. Grouping Variable: gender	

On the basis of table 13 researchers found that the asymptopic sig value was 0.122 which was less than 0.05 at 5% level of significance. Hence we reject the null hypothesis. Hence researcher concluded that irrespective of their age groups, call center employees were satisfied regarding the job rotation policies adopted by their organization to enhance the skills and competencies of Call Center employees.

IV. Conclusion: Researcher found that the overall employees working in the Call Center at Pune were satisfied with their organization. Researcher also found that considering the experience and salary the satisfaction level of the employees differ significantly regarding salary. It could also be concluded that among the call center employee there was no difference of satisfaction level regarding training opportunities between different age groups. When the job rotation policy was considered researcher conclude that between gender groups there exists no significant difference in satisfaction level of call center employee.

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"Talent Acquisition & Retention in Social Enterprises: Case Study on Management Institutes, Pune"

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Abstract:

A Social enterprise can be a 'For Profit' or 'for non Profit' venture engaged in income generating activities with an agenda of bringing about positive change in the society. Social enterprises are engaged in the development of people/society. Educational Institutes are also a Social Enterprise engaged in providing knowledge, skills, and development of everyone who have urge to seek that. Over the years there has been a phenomenal growth in the number of Educational Institutes / Social Enterprises in Pune & India. This is partly a consequence of a new policy of the government to gradually withdraw from social development activities.

"Education is the most powerful weapon which you can use to change the world"- Nelson Mandela
Talent has a connotation of distinction. It is something that sets one apart. The point to be underscored here is that talent is commodity in short supply and comes at a price, since it is a scare resource, needs to be optimally managed. Each resource in the organization plays vital role in its success. Amongst all the available resources in organization, human resource is the most crucial one. Managing human resources in an effective manner can lead to be better chances of organizational success. Pune better known as "Oxford of the East" One of the worlds' well known University of Pune. Pune has Maximum B Schools offering professional courses Burgeoning problem is the acquisition, retention & development of talent. This paper seeks to understand & analyze the causes of acquisition & retention rate of employees in management institutions of pune. Paper tries to diagnose the malady & remedial solutions. The essential theme of this paper acquisition, management & development of proper talent pool.

Keywords: *Social Enterprises, Talent acquisition, Retention, Potential & skills, Talent Management.*

Introduction: Importance of Educational Institutes & Education in Pune:

"Vidyevina Mati Geli, Mativina Neeti Geli, Nitivina Gati Geli, Gativina Vitta Gele, Vittavina Shudra Khachale, Itake Anarth Eka Avidhene Kele". As rightly said by Mahatma Jyotiba Phule. A nation is built to a large extent in its educational institutions – in its classrooms, laboratories, libraries and playing fields. Educational Institutions are regarded as knowledge industry & these are related to creation of knowledge. All other activities are meaningless if knowledge is not created by some institutions or people. The persons engaged in creation & imparting knowledge are very important ones for all societies & countries in the world. Educational institutes not only produce highly skilled and enlightened manpower needed for the political, economic and social transformation and development of our country but also shoulder the responsibility of lending dynamism, resourcefulness and intellectuality to it. The teacher is the backbone of the educational system, the maker of mankind and the architect of society. A nation grows with the teachers and with the education imparted to the people. It is in this respect that the role of the teachers acquires significance in shaping society and in bringing revolutionary changes in the development of the country. The retention of this community in educational system especially individual institutes is necessary

for the effective and proper use of the resources for rendering maximum service to society through building up the future human-resource pool of the nation.

Pune better known as **"Oxford of the East"** has the best talents and resources. It is the **most active educational hub in the country** and is home to more than a hundred fairly large and high quality educational institutes and home of one of the **world's well known University of Pune** and **over 10 deemed universities**. Pune has **more than 50 B Schools** offering professional courses. It is home to more than 50,000 students studying varied subjects. Pune is known for its educational facilities and relative prosperity. People engaged in imparting higher education have to play a vital role in every society. Pune, which is an Educational Hub of India are not exceptions in this regard.

A number of findings and observations especially regarding management institutes are pointers to the fact that the education cosmos is sitting on a veritable landmine – that of talent crisis. Institutes at large are facing an acute dearth of academic talent development task high on their list of priorities. In this paper an endeavor has been made to discuss about how the "Talent is to be Acquired, Retained, Talent Developed."

From the earlier oft-repeated phrase of 'no one is indispensable', today the key words for any HR department are 'key personnel', 'talent war' and 'attrition'. In such a situation, employee-retention programs have gained importance not only in sectors like IT/ITES, retail, banking and financial services but also educational institutes, which witness high rates of faculty turnover. After talent acquisition and talent management, talent retention is the next most important issue on any HR agenda. Says Zubeen Mody, senior vice-president, HR, IndusInd Bank, "Employee retention is of utmost importance. At the senior level, each individual brings a unique set of skills. Where talent is already rare and people with requisite skills and experience are difficult to find, retention becomes a critical component of organization-building."

Review of Literature relating to Talent & Talent Management:

Talent may be defined as the inherent ability of an individual to do a particular task in a particular way. Talent management incorporates attracting, retaining and developing the talent pool available to an organization in association with the other functions of management, so that the organization is never rendered bereft of expertise. Talent management is a professional term that gained popularity in the late 1990s. McKinsey & Company, following a study in 1997, coined the term and then it was the title of a book by Ed Michaels, Helen Handfield-Jones and Beth Axelrod. Talent management is a systematic process of identifying, assessing, developing and retaining people with critical knowledge, skills and competencies. At the workplace, capability could mean member's readiness to seek, undertake and carry out challenging work assignments. Talent management systems provide an organization with the vehicle of attracting and retaining the right skills at the right time in the right jobs.

The term 'talent management' means different things to different people. To some it is about the management of high-worth individuals or "the talented" while to others it is about how talent is managed generally, i.e., on the assumption that all people have talent, which should be identified and liberated. This term is usually associated with competency-based human resource management practices. Talent-management decisions are often driven by a set of organizational core competencies as well as position-specific competencies. The competency set may include knowledge, skills, experience and personal traits (demonstrated through defined behaviors). Management gurus have defined talent management as the deployment of special strategies by the organization to recruit, retain and develop their pool of top talent.

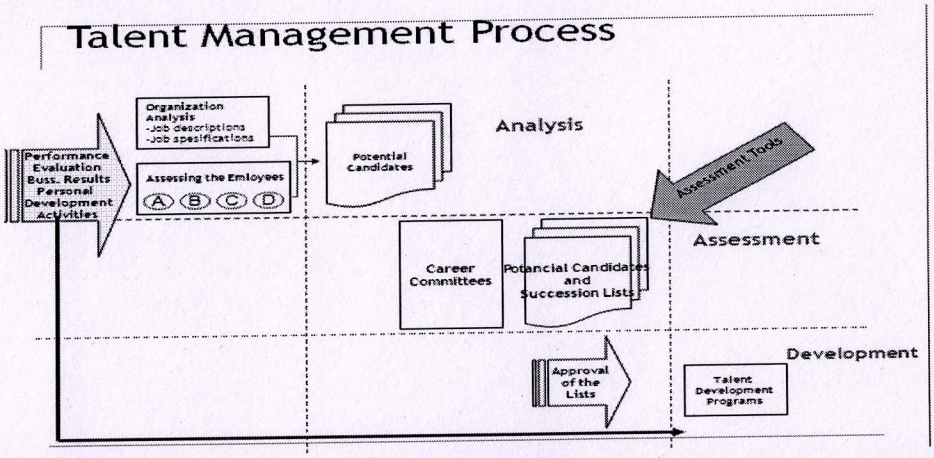
Talent Management Process:

Talent defIned Accord ing to Mc Kinsey, talent is the sum of a person's abilitIes,

- His or her Intrinsic gifts,
- Skills, knowledge, experIence,
- Intelligence,
- judgment, attitude, character, drIve,

■ hIs or her ability to learn and grow.

Talent management, in simple terms, is a scientific mechanism for acquiring, developing and motivating people with the right skill set and approach to meet business objectives. . A high turnover of employees hampers the growth of the organization. So, in order to ensure that the organization does not lose its valuable human resources it is necessary that a proper talent management system is in place. A typical talent-management process involves the following stages:



1. **Attracting Talent:** Attracting talent would involve assessment and selection of human resources. It would basically require the evaluation of the present workforce. This evaluation unravels the existing discrepancy between the needed talent and existing talent.
2. **Retaining Talent:** In the fast-growing competitive world the organization can survive only with its talented employees. The organization may face several challenges, such as ageing workforce, high attrition rate, increasing skill shortage, etc. Among these high rate of attrition of employees is the major challenge. This can be seen in the following figures of attrition of employees at Infosys - 10.7 % Wipro - 17 % Satyam - 18 % HCL Technologies - 13.1 % i-Flex Solutions - 19 %

The growth rate of these IT companies is tremendous, but so is their attrition rate. Similar phenomena are observed in educational institutes as well. An organization facing a high attrition rate is often hard presses with other ongoing HR activities like recruitment, training, compensation revision and survey etc., so that eventually no time is spent on the development of employees (Kumar, 2003). A good retention strategy will ensure the presence of following elements in its organization, so as to prevent any further exodus of the employees:

1. Exciting work 2. Good organizational culture 3. Robust leadership 4. Wealth and rewards 5. Prospects of career growth and development

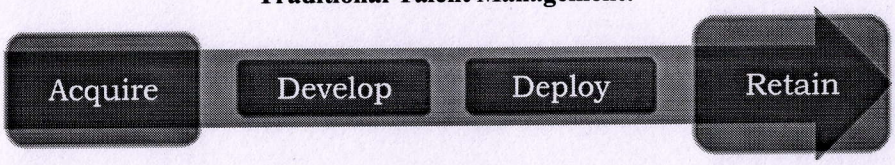
3. **Developing Talent:** Development represents efforts to improve employees' ability to handle a variety of assignments and to cultivate capabilities beyond those required by the current job. Development benefits both the organization and the individual employee.
4. **New-job Integration/Assimilation** : Development of talent should be done in such a manner that the employees are at ease when faced with the situation like that of job rotation.
5. **Training:** Training is a process whereby people acquire capabilities or develop their existing competencies to aid the achievement of organizational goals. Talent training specifically aims at bridging any gap between the existing and required competencies of the employees for better succession planning.
6. **Succession Planning:** It is the process of identifying a long-term plan for the orderly replacement of key employees. A good succession plan always ensures the ready availability of the right person at the right time and at the right place doing the right work in the event of the current incumbent not being there for the any

of the aforementioned reasons.

7. **Transitioning Talent:** Transitioning talent implies that employees are deputed on some new position for a short period of time, so that they are able to provide a new insight into this job as well as learn some new skills for their existing job. This will include following :

a. **Outplacement:** Outplacement is one of the strategies through which the employees can be placed at some important job in another organization for a short duration, maybe on an exchange basis.
b. **Senior-executive Programs:** Organizations require trained executives to face the challenges. When a manager leaves the organization, it creates a major crisis in the organization. . At that time we need a leader who can fill this gap and pull the organization up with the help of his personal charisma and competencies.
c. **Partner/Spouse Relocation:** In the present world of cut-throat competition it has almost become a necessity for husband and wife both to work. They have their own sets of commitments related to their organizations.

Traditional Talent Management:



Futuristic Talent Management:



"Organizations need to get the right people on the bus and in the right seats to succeed." "Good coaching, training, mentoring, etc., is not likely to make up for bad selection."'"Hire hard....Manage easy!" - ***Collins, J. (2001). Good to great.***

Critical Elements of Attracting and Retaining TOP Talent:

1. Constructive Relationship; 2.Culture of Respect & Inclusion; 3. Workplace Flexibility; 4. Wellness Health & Safety; 5. Benefits, Compensation on are Faire & Attractive; 6. Learning & Development; 7. Provision of Employment is Secure & Predictable; 8. Opportunities for meaningful work;

Objectives of Study:

The purpose of this study was to find answers to questions through the application of scientific procedures. The main aim of study was to discover the truth that is hidden and that has not been discovered as yet. The prime objectives were:

a) To understand the concept of talent management
b) To analyze the factors that lead to the high turnover rate of faculty
c) To suggest ways to reduce the turnover rate of faculty

Research Methodology:

Research design is **Descriptive**. A number of management institutes have been used From Pune & adjoining places to collect a sample of 50 Respondents **randomly**. The sample size was purposefully kept small due to constraint of time & resources. Questionnaire was prepared & used for the collection of

Primary Data. Sample was distributed across the hierarchical levels. Respondent are active Professors, Asst. professors, lecturers of management institutes. 27 are Male & 23 are Female.

Analysis: Comprehensive Table:

Sr. No	Question Asked	Response
1	Working in Educational sector from last (Length)	a. 0 to 2 yrs – 24% b. 2 to 5 yrs – 46% c. More than 5 yrs -30%
2	Working with the same institute from last ----yrs	a. 0 to 2yrs – 12% b. 2 to 5yrs – 49% c. More than 5 yrs – 39%
3	Getting salary as per expectation	a. Yes – 39% b. No – 61%
4	Are you satisfied with the Infrastructure of your Institute	a. Yes – 61% b. No –39%
5	Encouragement given to Faculty Development Program	a. Yes – 37% b. No -- 63%
6	Your Institute's policies on intangible recognition of employee efforts	a. Yes – 52% b. No – 48%
7	Does your institute promote merit based promotions	a. Yes – 62% b. No –38%
8	Always pressed for time due to workload?	a. Yes – 56% b. No –44%
9	Dislike most about your work profile	a. Teaching – 0% b. Student counseling – 21% c. Evaluation work – 32% d. Administrative responsibilities – 47%
10	Reasons for leaving your institute would be	a. Salary – 39% b. Workload – 11% c. Inappropriate management – 7% d. Timing – 2% e. Poor Infrastructures – 13% f. Work Environment – 3% g. Organization politics – 12% h. Management Attitudes towards faculty – 13%

Findings: - Employee attrition is a costly affair for all organizations. In today's taxing business climate, competitive environment, managing an institute's competent and skilled human capital is vital for success. This study has explored the prime factors for employee attrition and suggests some retention strategies and processes that will help achieve long-term tangible business benefits.

It can he noticed from the comprehensive table, that most of the faculties of management institutes are working with an experience of more than 2years.Inspite of this nearly 61% faculties are not satisfied with the salary they are getting as per expectation. Members are satisfied with the infrastructure; they are generally pressed for time, reported that they are overworked. Evaluation & Administrative responsibilities are mainly disliked job responsibilities. Through our research we found that most of the faculties leave their institute cause of Salary, organizational politics, Management Attitudes towards their faculty. Attrition rate more cause of salary & important factor for retention to his/ her in same organization is infrastructure,

teaching, & work environment.

When approached beyond questionnaire respondent expressed their view that quality of education going down due to the entry of business motive, organizational politics, insufficient salary & salary not on time in set up. These are the factors collectively deteriorate the quality of education.

Other Major findings understood from the general discussion with the Management of institutes are as

1. Retention Problem; 2. Better promotional opportunities in other institutes;
2. Management Attitude; 4. Job Insecurity; 5. Growth Prospects

Despite all the talk about growth, challenge, self-fulfillment, meaningfulness and all other motivation factors (Herzberg's two-factor theory) salary, that is monetary motivation, still remains the most important factor in retaining employees. Probably it can be attributed to a more or less similar kind of work environment prevailing in almost all management institutes. In the given scenario salary becomes the only differentiating factor.

Retention Strategies:

As per the research output / findings we think management institutes should focus on quality education delivering with a quality faculty. Management Institutes may use the following strategies for the retention of faculties.

1. Positive Motivation to talented faculties : Empowerment, Reorganization, R & D
2. Minimize Abrasiveness
3. Compensation Management – Salary on time / Salary as per Cadre
4. Skill Development Program
5. Team Building & Change management Activities / Methods

Conclusion:

The role of the teacher is extremely crucial in the context of education being the best instrument of change and nation-building. To play his role more effectively, the teacher faces a greater challenge today than at any time in history. As an interpreter, the teacher has to place new knowledge and new experience within the context of what is already known and understood by the students. In order to be a good mediator, he has to understand a great deal about the way in which people at various ages and stages of development perceive the world around them. He is actually the linking pin and if the form of this linking pin keeps on changing every six months, it leaves the institute in a lurch and creates a big void in the mindsets of the students. A successful retention practice will help in developing a network of experienced and talented employees who can join hands in hand to take up challenges in the present and future as well.

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'A Study of IFRS in India – Its Challenges'

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Abstract:

Financial reporting should be done by adopting accounting standards with transparency and trust. Globalization has laid down a way for all the countries to adopt a single set of accounting standards. IFRS are the globally accepted accounting standards and interpretations adopted by the IASB. India has decided to adopt the IFRS by April 2011. Therefore the knowledge of IFRS and their impact on financial sector should be assessed very carefully along with its problems and challenges. For successfully implementation of IFRS Indian context would be the level of regulatory sponsorship, the appropriate level of investment in systems and process and consistency in market practices for areas where judgment in critical. The financial impact of convergence with IFRS will be significant for financial sector in India. An attempt has been made in this paper some significant challenges in adoption of IFRS in finance sectors. IFRS is to create comparable, reliable and transparent financial statements that will facilitate greater cross-border capital raising, trade and better corporate governance practices. The paper examines the need of IFRS. The purpose of the study is to discuss the problems and challenges to be faced by the stakeholders. The final aim of the study is to see the impact on Indian financial sector.

Keywords: *ICAI, IFRS, NACAS, Financial Statements, Globalization.*

Introduction:

The objective of financial statements is to provide information about the financial position, performance and cash flows of the firms that is useful to a wide range of users in making economic decisions. A financial reporting system supported by strong governance, high quality standards, and firm regulatory framework is the key to economic development. It is in this context that an independent, global standard-setting body such as the International Accounting Standards Board (IASB) has to play the important role. Globalization has laid down a way for all the countries to adopt a single set of accounting standards. More than 100 countries (including India) have recognized the importance of convergence with the IFRS. IFRS are the globally accepted accounting standards and interpretations adopted by the IASB. India has decided to adopt the IFRS by April 2011. Therefore the knowledge of IFRS and their impact on financial sector specially in banking sector should be assessed very carefully. For successfully implementation of IFRS Indian context would be the level of regulatory sponsorship, the appropriate level of investment in systems and process and consistency in market practices for areas where judgment in critical.

Objectives: The objectives of the study are given below:

1. To know and understand the concept of IFRS.
2. To observe the financial impact of convergence with IFRS for financial sector in India.
3. To see the role of ICAI.
4. To find out the utility of convergence with IFRS in India.
5. To study the problems and challenges faced by Indian Companies.

Research Methodology: This research paper is purely based on secondary data. On the basis of published data in magazines, books, annual reports, information available through websites this paper is presented to you.

Data Analysis:

IFRS: Concept and Meaning: The International Financial Reporting Standards are prepared and developed by the International Accounting Standard Board. The Institute of Chartered Accountants of India (ICAI) set up the Accounting Standards Board in 1977 to prepare accounting standards. In 1982, ICAI set up the Auditing and Assurance Standards Board (initially known as the Auditing Practice Committee) to prepare auditing standards. ICAI became one of the associate members of the International Accounting Standards Committee (IASC) in June 1973. ICAI also became a member of the International Federation of Accountants (IFAC) at its inception in October 1977. While formulating accounting standards in India, the ASB considers IFRS and tries to integrate them, to the extent possible, in the light of the prevailing laws, customs, practices and business environment in India. International Financial Accounting Standards (IFRS), previously called as International Accounting Standards (IAS) are the Standards, Interpretations and Framework for the preparation and presentation of financial statements adopted by the International Accounting Standard Board (IASB) IAS was issued in 1973 and 2001 by the board of the Internal Accounting Standard Committee (IASC). On 1st April 2001 the new IASB took over the responsibility of setting International Accounting Standards from IASC. It is a set of international accounting and reporting standards that will help to harmonize company financial information, improve the transparency of accounting and ensure that investors receive more accurate and consistent reports. The entire world has recognized the need for convergence of accounting standards and is moving towards its implementation. The target date for convergence to IRFS in India is given under:

- Companies with net worth of Rs. 1000 crores and those which are part of BSE sensex, NIFTY and companies listed in overseas exchange: April 2011.
- All companies with a net worth between Rs. 500 – 1000 crores and Banks and Non Finance Companies : April 2013
- All listed companies with a net worth of Rs. 500 crores or less: April 2014.

India is on the verge of converging with IFRS with a view to bring about uniformity in reporting systems globally, enabling businesses, finances, and funds to access more opportunities. The Ministry of Corporate Affairs (MCA) in its press release dated 25th February 2011 had notified 35 Indian Accounting Standards converged with IFRS (known as **Indian AS**). The MCA will implement the Indian AS in a phased manner after various issues (for example tax related issues) are resolved with the concerned departments/authorities. Though, there has been considerable delay in the implementation of these standards, efforts are on the run. The newly revised Schedule VI which is based on IAS 1 is a clear evidence of being optimistic on convergence with IFRS.

Need for IFRS in India: Due to LPG, many multi-national companies are establishing their businesses and branches in various countries. The organizations in the current scenario are increasingly accessing the global markets to fulfill their capital needs by getting their securities listed on the stock exchanges outside their country. Capital markets are becoming integrated globally. More and more Indian companies are now being listed on overseas stock exchanges. The aim has always been to follow the IFRS, to the extent possible, while formulating the Accounting Standards. However, there is a difference between AS and IFRS due to various reasons. Some of the reasons are as follows:

- There is a conceptual differences between AS and IFRS.
- Indian firms and companies are not mentally prepared to accept and adapt IFRS.
- Indian economic environment is different than other global countries.

- To maintain consistency with the Legal and Regulatory Requirements

Need for Convergence to IFRS: In the present scenario of LPG financial reporting standards requires a constant review to maintain the pace with the fast changing global economic environment. In India financial reporting is in the stage of transition. In our country many changes are being introduced for convergence of international accounting standards. The Institute of Chartered Accountants of India has issued a paper on convergence with International Financial Reporting Standards (IFRS) to promote International Accounting Standard Board's (IASB). IFRS are globally accepted accounting standards and interpretations adopted by IASB. The Standards, which are a part of IFRS and issued by the board of International Accounting Standards Committee (IASC) before 2001, are known as International Accounting Standard (IAS). In April 2001 the IASB adopted all IAS and developed them by renaming as IFRS. These IFRS refer to the new series of the pronouncements that the IASB is issuing, as distinct from the IAS series issued by its predecessor. IFRS comprise:

- IFRS issued after 2001.
- IAS issued before 2001.

Role of ICAI: The IFRS are classified into five categories. Hence ICAI adopted two approaches to meet convergence with IFRS.

(A) Stage wise approach: In the first stage, category I of IFRS, the convergence will come immediately. Category II and III will come in convergence after fulfillment of technical knowledge during the second stage. In the third stage the convergence will come after the change in law or regulation i. e. category IV and in the last stage convergence is applicable to category V with full adoption.

(B) All at once approach: The ICAI is of the opinion that it would be difficult to follow the stage wise approach. Hence ICAI finally decided to adopt IFRS from 1st April 2011 by constituting a committee of core group for smooth implementation of convergence process of IFRS.

Utility of convergence with IFRS: The adoption of IFRS will greatly affect on financial sector of India. Implementation of IFRS will definitely boost Indian economic environment.

1. The convergence with IFRS will definitely reduced the cost of preparing financial statements. There is no need to prepare separate set for each country. One set of financial statement is now applicable to all countries in the world.
2. The pressure and load of preparation of financial statements will be minimized due to global acceptance of IFRS.
3. The convergence with IFRS will boost the confidence level of Indian investors. Due precaution has been taken in IFRS about the rights of the investors.
4. Accounting information will be more reliable and comparable due to IFRS. This information will help investors to explore investment opportunities easily and quickly due to global acceptance of IFRS.
5. Due to the convergence with IFRS the growth of Indian business will increase. Simultaneously there will be increase in the growth of business globally.
6. It will be easy for firms and companies to borrow the funds from the domestic market. Funds will be raised from foreign markets at a lower cost.
7. Foreign currency will be available from overseas market with increased inflow. At the same time the investment will also be increased due to IFRS.

Problems and Challenges faced by Indian Companies: The accounting system in India is regulated and affected by various laws and regulations. Changes are required to be made in various regulatory requirements under the Companies Act, 1956, Income Tax Act, 1961, SEBI, RBI, etc. After the change or amendments in these laws and regulations then and then only IFRS financial statements are accepted

globally. It is said that the USA will probably adopt IFRS in 2014 and Japan in 2015. The corporate are not ready to accept a convergence immediately. Political pressure and disturbances are also the reasons for the pending cases in various amendments in laws and regulations.

Challenges for banks and non-banking financial companies: In respect of banks and NBFCs, the convergence process would be from period beginning April 1, 2013. This gives the banking system some time to adapt to the standards as per IFRS. Some of the major changes pertain to certain critical areas such as classification and measurement of financial assets, classification and valuation of liabilities, impairment provisions and fair value measurement. One area of concern has been the drawback of the incurred loss model of IAS 39 and the need to introduce more forward looking provisioning. Banks would need to upgrade their infrastructure, including IT and human resources, to face the complexities and challenges of IFRS. Some major technical issues arising for Indian banks during the convergence process would be differences between the IFRS and current regulatory guidelines on classification and measurement of financial assets.

Challenges for non-accounting issues:

- Data integrity and data validity would be of critical importance especially due to data intensive requirements of IFRS converged standards.
- Maintaining ethical standards and values is a key part of financial reporting. Without a strong code of ethics and adherence to those ethics, financial reporting would fail to inspire and ensure public and investor confidence in entities. Professional bodies have codes of ethics for their members and disciplinary procedures for those who infringe upon these rules.
- Adaptability and compatibility of existing IT solutions used by banks to the new requirements imposed by IFRS convergence is also a major challenge.

Major Challenges:

- ✓ It is very difficult in India to bring the awareness among the people about IFRS and its impact and a challenging task. There are no similarities between IFRS and GAAP.
- ✓ The reconciliation of GAAP is also difficult. Reconciliation of ongoing unaudited financial statements involves huge amount and it is costlier matter to Indian firms and companies.
- ✓ It is essential to provide training and education to the people for the smooth implementation of IFRS. Currently, there is lack of training and education programs about IFRS.
- ✓ In India, various regulatory bodies, laws and authorities are taking care of financial reporting requirements. There is no coordination among these authorities. In such case it is very complicated to implement IFRS that requires change in laws, rules and regulations.
- ✓ In the current scenario, there is no coordination between Indian Tax Laws and Accounting Standards. To implement IFRS, it becomes mandatory to make the changes in Indian Tax Laws.
- ✓ The corporate sector has to ensure to make modifications to suit the reporting requirements of IFRS. The IT system should be redesigned as per the new requirements.
- ✓ IFRS focuses on fair value or true value to measure the transactions of financial statements. Truly speaking it is very challengeable job to calculate the fair value and it is a hard task to the professionals.
- ✓ As per the requirement of IFRS, it is necessary to re-negotiate the contracts of Indian firms.

Conclusion: In the era of LPG accounting professionals and economic decision makers are realizing the fact that day-by-day reporting requirements, the information are changing very quickly. Globalization has laid down a way for all the countries to adopt a single set of accounting standards. More than 100 countries (including India) have recognized the policy of convergence with the IFRS. India has decided to adopt the

IFRS by April 2001.Therefore the knowledge of IFRS and their impact on financial sector specially in banking sector should be assessed very carefully. Training, education and skill development is one of the cornerstones of a successful IFRS implementation. All the stakeholders would need to develop and understanding of IFRS provisions to varying degrees and what they need to do.

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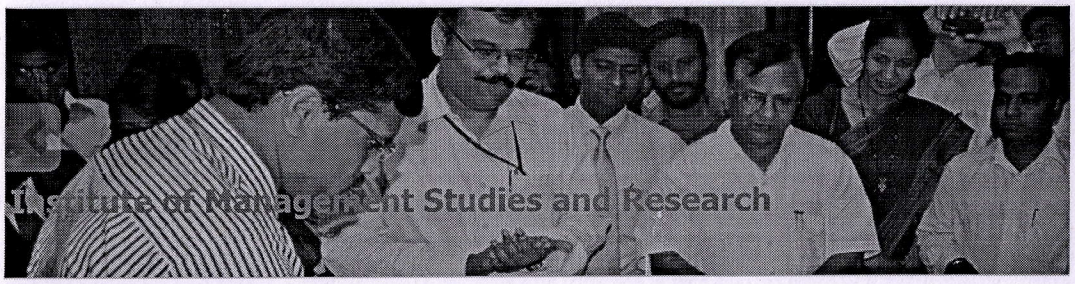
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Inventory Management With Respect To Spare Parts Availability Assurance Across 54 Channels and Mother Warehouse: A Case Study

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Abstract

Inventory management of spare parts is a comprehensive study done in a vehicle manufacturing company for a period of three months. The main objective behind this research is to understand the patterns of customer requirements and to ensure the parts availability in market, which ultimately results in good vehicle sales. Besides, an attempt was made to improve parts availability across the channel. Main constraints in achieving this are accurate forecasting, dealer investments, time availability and inventory requirement planning.

The company had done a survey by employing an external agency, which selected 1046 customers out of 2000. The questions were linked to sales performance. The agency found that parts availability is a major threat to the sale of the vehicles. Customers were unhappy about parts availability leading to poor brand image and losing market share. Hence the study of parts inventory management.

In this research, secondary data has been collected from ERP reports. Critical part list has been generated using Delphi method and then FSN, VED, and HML analysis has been carried out followed by application of Plan-Do-Check-Act method. To handle dealer reservations about investment in parts, researchers found out those dealers were ready to invest up to Rs 2 lakhs only. Based on this feedback the researchers made two types of kits. One called Dealer's kit and the other kit consisting of 'Company Stock at Dealer end'. Once the kits were finalized, managers started pushing dealers and customer care managers to place timely purchase orders to ensure that parts are made available at dealer's end within one month of placing orders. This has resulted in improvement in the fulfillment of dealer's order, enhanced customer satisfaction and increase in sales.

Keywords: Inventory Management, PDCA, FSN analysis, VED analysis, HML analysis

Introduction

Parts management is an important aspect of Inventory management. Non availability of parts at the dealer level or even in the company warehouses can have serious repercussions on sales, market share, profits and image of the company. Their timely availability must be ensured but without unnecessary blockage of capital. As far as possible scientific inventory control methods must be employed to control parts as it otherwise difficult to predict which part, in what quantity and at what location will be in short supply.

In the current case dealers were hesitant to keep additional parts in their inventory as they were already saddled with a lot of non-moving inventory and did not wish to block their capital any further. On the other hand there was negative feedback from end users, compelling

action and steps that would help assure timely availability of parts.

Secondary Data: (External Agency Survey done in March 2013) Negative feedback was given by customers on 'parts availability': 30% out of 743 customers who have used machine for more than 300 days.

Negative feedback was given by customers on 'parts availability': 18% out of 303 customers who have used machine up to 90 days.

Issues	Feedback from Customers: More than 300 days (%)	Feedback from Customers: Up to 90 days (%)
Unavailability Of Spare Parts	30	18
Service Quality And TAT	19	17
Product Quality	17	15
Service Center Location Proximate	10	9
Technically Qualified Personnel	6	8
Remote Care Related	5	7
Weight Of Parts	5	7
Cost Of Spares	3	5
High Cost	2	4
Issue With Hydraulics	1	4
Space Related	1	3
Warranty/ Claim Related	1	3
Total	**100**	**100**

(Table 1: Improvement Areas in Service for Overall Customers)

Concepts

Selective inventory control is an essential part of inventory management which emphasizes on variations in methods of control of inventory. Important selective inventory control methods are:

FSN (Fast moving, Slow moving and Non-moving) **Analysis**

This classification relates to consumption pattern of parts. Items are classified into FSN on the basis of the date of receiving v/s date of issuing materials in the store.

VED (Vital, Essential and Desirable) **Analysis**

The VED analysis is done to determine the criticality of parts and their effect on production and other services. It is specially used for classification of spare parts. If a part is vital it is given 'V' classification, if it is essential, then it is given 'E' classification. If part is not so essential and alternate part can be used, the part is given 'D' classification. For 'V' parts, a large stock of inventory is generally maintained, while for 'D' parts, minimum stock is enough.

HML(High, Medium and Low) **Analysis**

HML analysis includes classification based on the per unit value of the parts. The management decides the cut off prices for the three

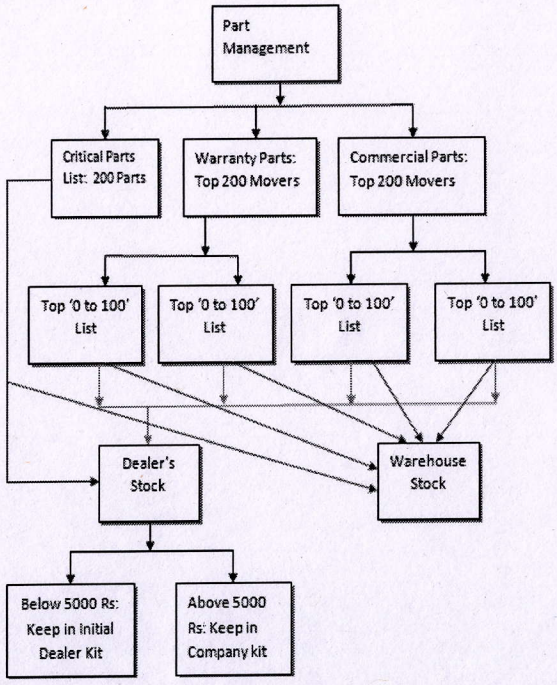
categories of parts. This analysis helps determine storage and security requirements. All High value parts are accorded greater security and tighter controls in purchases, storage and issues.

Objectives of the study

- To ensure the availability of right spare parts, at right time, at right locations across the channel.
- To ensure the availability of right spare parts, of right quantity at warehouses.
- To increase the sale of spare parts.

Data analysis and interpretation

PLAN



(Figure 1: PLAN Activity)

Critical and top fast mover parts are in consideration. Top Movers are further dividied into 2 segments. Parts under warranty and commercial top 100 parts and all critical parts are kept at dealer's end. Parts costing below Rs. 5000 are kept in Initial Dealer Kit and above Rs. 5000 are kept in Company kit.

DO

I) Action for Initial Dealer Kit (IDK) at dealer and Customer Care (CC) end

1. A circular was sent to dealers informing them about IDK parts.
2. Dealer was asked to undertake Physical verifications and order for parts in shortage
3. Dealer to send the non-moving parts back to store.

II) Actions for IDK at Warehouse and procurement end

1. Max stock level enhanced for these parts and their availability ensured at Head Office
2. Store team instructed to dispatch these parts on same day of requisition
3. Store team to ensure immediate payment for parts returned

CHECK

I) Check for IDK at dealer and CC end:

1. Customer Care Managers (CCM) to prepare list of non-available parts by 23rd day of every month and place an order for the same
2. Managers have selected zone wise Auditors who will conduct Audit on every 25th day of the month.
3. From Head Office, researchers have provided simple format and procedure for Audit.

II) Check at dealer and CC end:

1. Monthly physical stock verification.

III) Check for IDK at Warehouse and procurement end:

1. Fortnightly Purchase Order report for IDK parts.
2. Store team to publish the report on FFR for every month.

ACT

Auditor and HO to make a list of remedies which will ensure that the order has been placed for 'stock out' parts.

Planning team to update the stock norms based on the requirements and to keep sufficient stock at warehouse.

Plan (Planning and Analysis for Selection of 'Critical' Spare Parts)

FSN Analysis

Based on last one year's data, researchers have classified parts as follows:

FSN Category	Movement Of Parts Considered	Number of Parts (Total 2059)
Fast moving	> 42 times for commercial parts and 7 times for warranty parts	219
Slow moving	0 to 42 times for commercial parts and 0 to 7 times for warranty parts	968
Non moving	Not moved since last 1 year	872

Table 2: FSN Analysis for Total 2059 Parts

VED Analysis Done By Using Delphi Method

VED analysis was carried out on a total 2059 parts.

Vital – This list was prepared based on inputs from Customer Care Manager and technical desk and consist of items which if not available will lead to breakdown of machine and consequent losses.

Essential – These part lists are taken from ERP system. These parts are listed under warranty parts. The non-availability of these parts do not cause breakdown, but customer may ask for immediate replacement as machine is under warranty.

Desirable – All the remaining parts are taken as desirable..

VED Category	Number of Parts(Total 2059)
VITAL	269
ESSENTIAL	150
DESIRABLE	1640

Table 3: VED Analysis for Total 2059 Parts

Final Selection of Critical Parts

After FSN and VED analysis was carried out on 2059 parts, a final list of crucial parts was prepared consisting of 'fast moving' 'vital parts' and few parts that are 'fast moving as well as vital parts'.

Researchers have selected total 418 such parts. The availability of these parts if assured would lead to elimination of a majority of customer complaints: .

FAST MOVING PARTS	149
VITAL PARTS	200
FAST MOVING and VITAL PARTS	69
TOTAL	**418**

Table 4: Final Selection of Critical Parts

Two Main Kits Generated From 418 Line Parts

After this researchers created 2 Kits, which would manage overall parts availability in the field. Researchers had considered dealer's constraints and other practical problems at their end and therefore included in their kit low value parts.

Categorized Line Parts Distribution	No of line parts
Dealer Kit	127
Company Kit At Dealer End	213
Special Kit	26
Total Number Of Line Parts Categorized	35
Common Parts	17
Final total	**418**

Table 5: Categorization of 418 Critical Parts

HML Analysis Done For the Parts Which

Need To Be Kept In Dealer Kit

Researchers have suggested following price levels for HML categorization: The parts which cost more than Rs. 30000 to be kept in special kit. Parts ranging from Rs. 5000 to Rs. 30000 to be kept as company kit while those costing less than Rs. 5000 being low valued items to be kept in dealer's stock.

Table 6: HML Analysis for Total 418 Parts

HML Category	Price Cut Off(In Rupees)	Total 418
High	Above Rs. 30000 (15% parts from total list)	0
Medium	Rs. 5000-30000 (50% parts from total list)	51
Low	Less than Rs. 5000 (35% parts of total list)	367

DO: Format for Dealer Kit Ordering Parts

Researchers created a simple format for knowing stock levels and reordering levels at dealers' end based on Excel. The data would help them place timely purchase orders. .

Dealer Code	D26
Dealer Name	ABC
Number of machines	0
CCM Name	Mr. XYZ
Date	5/5/2013

Table 7: Format Suggested For Dealer Kit Ordering Parts

Part Code	SF0301054	2001EAA00290N
Part Description	NUT HEX M18X2X15.8X10	BUCKET BOLT
Gross Net Dealer's Price	27.35	49.55
For 10 machines Quantity	26	23
Total value (In '000 Rupees)	711.15	1139.66
Quantity that should be available at dealer's end	20	50
Available Quantity at dealer's end	00	03
F-Full available, P - Partial Available, N - Not available	N	P
Balance / Not available Quantity	00	00
Order Number	523	416
Order Quantity(1.5.13 to 2.6.13)	2640	1890
Previous Order Pending Quantity	00	210
Total Quantity	2640	2100
Total value	72209.28	155043.89

CHECK : Audit Format

Researchers selected auditors from available man power based on their experience and Head of Department's recommendations.

These auditors were requested to audit data on below listed data/criteria and thus ensure timely ordering of parts.

Dealer Code	CFS0016	CFG0081	CFS0033
Dealer's Name	ABC Pvt. Ltd	LMN Pvt. Ltd	PQR Pvt. Ltd
Dealer's Head Office location	Muzaffarpur	Ahmedabad	Madurai
Zone	East	West	South
Date Of Audit	28/5/2013	22/5/2013	30/05/2013
Machine population	39	50	12
How many parts are fully available with dealer?	90	89	86
How many non-available parts ordered at Head Office?	30	71	52
Value of the ordered parts	0.45Lakhs	2.02 Lakhs	1.86 Lakhs
How many "non-available parts" are not ordered till time? (with reason)	41	Order placed and parts Received	55
Target date/ Remarks (If Any)			
Category	Order Placed	Order Placed	Order Placed

Table 8: Format Suggested For Audit

ACT: Dealer Kit Part Status - Follow Up Taken With Customer Care Manager

Researchers have taken follow up with auditors and dealers to complete the parts ordering. As is evident the problems were being resolved over time.

Dealer Kit Status	**10/6/13**	**In %**	**22/6/13**	**In %**	**5/7/13**	**In %**
Bank Guarantee Issue	7	12.96	6	11.11	4	7.41
Not Replied	9	16.67	7	12.96	-	0
Order to be Placed	17	31.48	9	16.67	10	18.52
Order Placed	21	38.89	32	59.26	40	74.07
Total Dealers	54	100	54	100	54	100

Table 9: Dealer Kit Part Status

Warehouse Stock Summary

Researchers ensured that parts are available at warehouse and that the inventory department has kept up to increased stock levels. Availability of parts in warehouse and timely supply to respective buyers were verified.

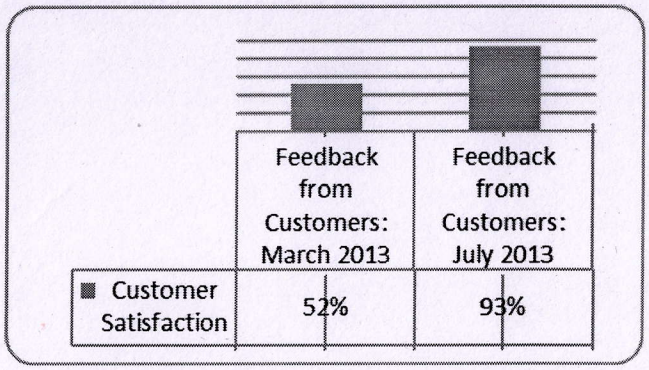
Warehouse stock summery (On Dates)	10.6.13	22.6.13	5.7.13	17.7.13
Total no of line parts	418	418	418	418
Available at Efficient stock level	253	268	298	403
Less than Efficient stock	165	150	120	15

Table 10: Warehouse Stock Summary

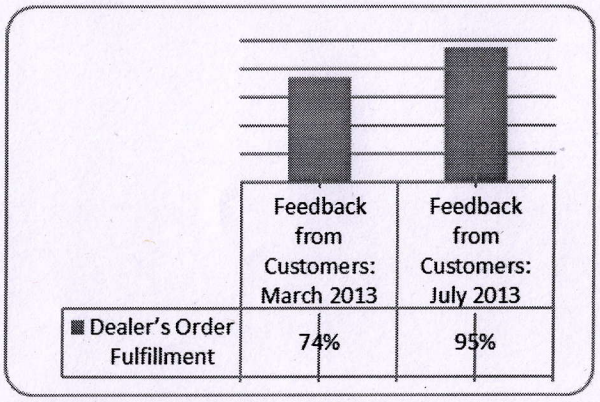
RESULTS

	Parameters	Feedback from Customers: March 2013	Feedback from Customers: July 2013
Result 1	Customer Satisfaction	52 %	93 %
Result 2	Dealer's Order Fulfillment	74 %	95 %

Source: External Agency Survey done in March 2013 and July 2013



GRAPH: Comparison of Customer Satisfaction

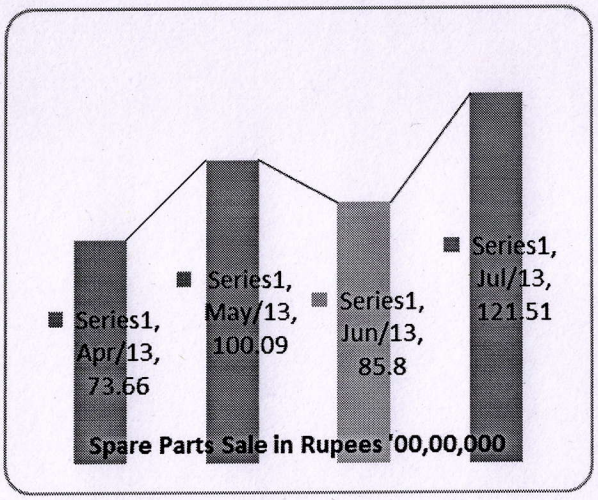


GRAPH: Comparison of Dealer's Order Fulfillment

Result:

Sr. No.	Month	Sales Revenues In Rupees (Lakhs)
1	April 2013	73.66
2	May 2013	100.09
3	June 2013	85.8
4	July 2013	121.51

Source: External Agency Survey done in March 2013 and July 2013



GRAPH IMPROVEMENT in Spare Parts Sale

company and the external agency cannot be mentioned.

Due to constraints researchers were not able to take into account all parts moving in market

A change in the trend of parts requirement will lead to non-moving inventory.

Abbreviations

BO: Back Order
CCM: Customer Care Managers
FFR: First Fill Ratio
IDK: Initial Dealer Kit
CC: Customer Care

Conclusion

1) By dealer's inventory management activity, researchers have pushed fast moving parts in dealer inventory due to which almost all customer orders are served immediately. Post research survey done in July 2013 indicates a significant improvement in customer satisfaction which has increased from 52% to 93%.

2) Researchers have controlled fast moving parts at warehouse end. Inventory department has enhanced stock levels for these parts at warehouse and have ensure that there are no 'stock out' conditions. This has resulted into 95% dealer's order fulfillment, which earlier was 74%.

3) Due to inventory management and control activity, company has given action and check plans to dealers about spare parts stock at their end, this has in turn improved their business. There is definite increase in dealer's profit as they are avoiding non availability of spare parts at their end. Company has seen drastic improvement in sales from 73.66 lakh rupees to 121.51 lakh rupees.

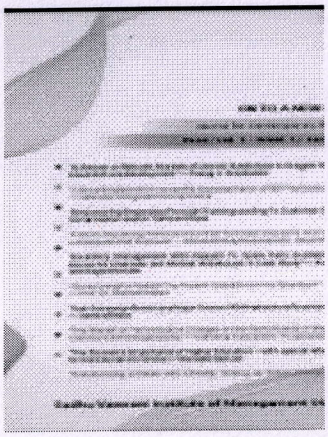
Limitations of the study

Although this is a true case study, on account of reasons of confidentiality, the name of the

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A Review of Periodic Markets of Umred Subdivision in Nagpur District: A Road towards Rural Development – Pranay V. Wankhede

Critical Roadblocks in Successful Implementation of ERP Technologies – Jatender Singhla and Prof. Abhay Kumar

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Inventory Management With Respect To Spare Parts Availability Assurance Across 54 Channels and Mother Warehouse: A Case Study – Rohan Dahivale and Sagar Bhosale

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"Supply Chain Improvement Through Shift In Vendor Location: An Analytical Study In An Automobile Industry"

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Abstract:

Supply Chain Management (SCM) is the new buzzword is today's world. The main objective of this research is to study the supply chain improvement through Value Analysis technique and to analyze its affects on entire supply chain system. SCM comprises of material flow, cash flow, information flow right from tier two suppliers to ultimate customer. In this research we have tier one supplier & Original Equipment Manufacturer (OEM) transaction only which involves material & information flow and worked on shift of supplier location.

In this research we analyze the existing supply chain transaction between supplier & OEM with considering various factors like inventory trend in number of days & also inventory in value, type of material packaging, transportation terms and freight costs. From this analysis we want to test the scope of improvement from supply chain point of view if we shift supplier location from existing one. Improving productivity is crucial factor in facing the challenge of competition & this involves driving down the cost of all aspects of business activities. Since there is maximum scope of cost reduction in the area of materials, doing the job of efficient & effective management of materials is seen as the key to higher productivity.

The expected result is improvement in the supply chain in terms of quality & quantity of raw material, inventory reduction, packaging improvement without any further investment.

Keywords: *Supply Chain Management, Inventory Management, Value Analysis*

CONCEPTS

The literature of SCM has exploded during last decade; it is a new buzz word for the current business models. SCM focuses all activities involved in production and delivering a final product or service, from the various sub-tiers to end customers, its theoretical framework originated from multi-echelon inventory models (Clark and Scarf 1960). The idea of cost-cost tradeoffs was introduced showing that the lowest total cost might be achieved by pursuing the lowest cost of each logistics process constituent. Hence, the concept of logistics integration was introduced by Bowersox (1969).

The idea of SCM is to evaluate the process of planning, implementing and controlling the movements of materials and finished goods all the way into end users.

Copra and Meindl (2001) defines the objective of SCM is to maximize the overall value of each of the chain. This is in accordance with what Siem (2005) has stated, SCM strives to get "the right things to right places at the right times for maximum profits"

OBJECTIVES OF THE STUDY

1. To study and observe the supply chain process of an automobile company.
2. To analyze the effect on shift in vendor location.
3. To analyze improvements in supply chain management.

DATA & DATA ANALYSIS: Vehicle Manufacturing Company at Chakan produces variety of models. There is in house production of vehicle engine only, rest of the child parts are procured from tier one suppliers. Being an OEM, company procure child parts, components & subassemblies needed for production from vendors & sale the finished products i.e. vehicles to customers. Hence the major functions at company, Chakan are purchasing of child parts & assembly of the same. All purchase related activities are looked after by department SCM which is considered as backbone of the plant as it ensure the right material, in the right quantities, with the right delivery (time and place), from the right source, and at the right price with the help of smooth supply of material, information & money along the whole chain right from supplier to ultimate customer. There is commodity wise procurement of child parts at company namely Casting & Forging, Electrical & Proprietary, DAC, Trim and Sheet Metal researchers have done research in electrical & proprietary commodity which encompasses parts pertaining to electrical system, ignition system, lighting system and engine assembly parts. Vendor group is having two different plants one at Nasik and another at Chakan, Pune. Vendor group keep supplying carryover parts of Chakan plant along with child parts from their old Nasik plant. Also they have established new plant at Chakan for supplying wiring harnesses to trucks. The below table furnishes details of child parts supplied by vendor. Also below table furnishes information regarding transportation of material from supplier end to Company

Part No	Description	Vendor CODE	Vendor Location
1801CA0480N	ROOF LAMP WIRING HARNESS	DV043B	Nasik
1801EA0160N	HIGH MOUNTED STOP LAMP W/H	DV043B	Nasik
0098780	EARTH CABLE -VE MDI SC/DC	DV043B	Nasik
1401CA0751N	BATTERY CABLE POSITIVE	DV043B	Nasik
1401CA0741N	BATTERY CABLE NEGATIVE	DV043B	Nasik
7905UAP00161N	WIPER MOTOR HARNESS	DV043D	Pune
7905UAP00061N	W/H GPS	DV043D	Pune
7905EAP00171N	WIRING HARNESS DBV vendor	DV043D	Pune
7905UAP00190N	WIRING FOR SPEEDO GROUND	DV043D	Pune
7905FAU00041N	W/H AIR PRESSURE TRANSDUCER	DV043D	Pune
7905UAQ00011N	W/H AIR FILTER CLOG SENSOR	DV043D	Pune
7905UAP00071N	W/H GPS Speaker	DV043D	Pune

V code	Location	INCO terms	Transporter	Approximate distance from Company
DV043B	Nasik	Ex works	Third party	250 KM
DV043D	Chakan	Free delivery	Vendor's own	5 KM

INCO terms mean (IN-warding Condition) terms:

Mainly there are two types of INCO terms. These are as follows:

- Ex works – Company picks consignment from Vendor end through third party logistics.
- Free delivery – Vendor delivers consignment to Company through his own transport.

INCO terms for vendor Nasik are Ex-works where material is delivered to Company through Transportation Company which is having collaboration with Company logistics. Vendor used to deliver material at Transportation Company's warehouse which then subsequently gets delivered to Company.

INVENTORY DATA

Inventory is commonly used to describe the goods and materials that any firm holds for certain purpose. In other word stock is commonly used to describe the capital invested in a business. Generally raw material inventory is important from purchasing point of view. Inventory management is a science primarily about specifying the shape and percentage of stocked goods. How much to carry? Is the main question in inventory management, as one has to keep this inventory value as low as possible to have less investment of capital in material at the same time one has to ensure that there will not be any production loss due to non availability of raw material with right material, at right time & right place. The generic formula for calculating this inventory value or quantity, below mentioned are considered.

- Average Daily Demand (ADD).
- In Transit Lead Time (ITLT) - in days.
- Vendor Response Time (VRT) - in days.
- Internal Lead Time (ILT) - in days.
- Safety Stock (SS) - in days.

So minimum inventory which need to be carried is calculated as:

Minimum Inventory = ADD * (VRT+ITLT+ILT+SS)

The same formula is applied for vendor Nasik, the data we found is furnished in below tables.

Inventory in no of days & value in rupees involved when parts are supplied from Nasik plant.

Part Number	Description	Supplier	SS (Days)	ITLT (Days)	ILT (Days)	VRT (Days)	Total
1401CA0751N	Battery Cable Positive	Vendor-Nasik	7	2	1	2	12
1401CA0741N	Battery Cable Negative	Vendor-Nasik	7	2	1	2	12
1801CA0480N	Roof Lamp Wiring Harness	Vendor-Nasik	7	2	1	2	12
1801EA0160N	High Mounted Stop Lamp W/H	Vendor-Nasik	7	2	1	2	12
0098780	Earth Cable -Ve Mdi Sc/Dc	Vendor-Nasik	7	2	1	2	12

Part No	Description	Supplier	Total	ADD	LL	Moving Average Price	Monthly Requirement
1401CA0751N	Battery Cable Positive	Vendor-Nasik	12	250	3000	153.56	460680
1401CA0741N	Battery Cable Negative	Vendor-Nasik	12	250	3000	117.44	352320
1801CA0480N	Roof Lamp Wiring Harness	Vendor-Nasik	12	100	1200	43.85	52620
1801EA0160N	High Mounted Stop Lamp W/H	Vendor-Nasik	12	100	1200	28.16	33792
0098780	Earth Cable -Ve Mdi Sc/Dc	Vendor-Nasik	12	100	1200	18.77	22524
						Total (Rs.)	**921936**

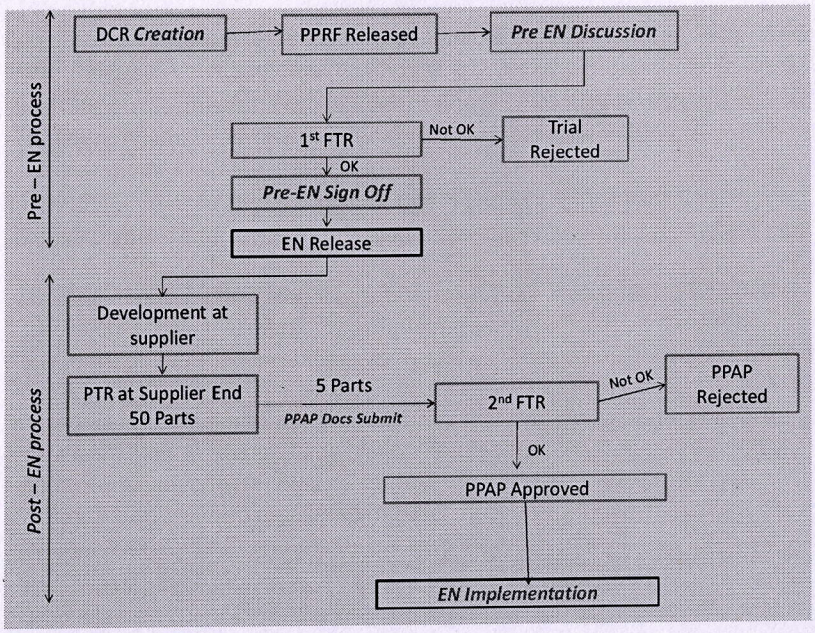
After analyzing the data researcher have following findings

- Child parts supplied by vendor Nasik plant are having more inventories, so the capital blocked in the same is more.
- More freight cost involved during the transport from Nasik to Chakan.
- Packaging of child parts is corrugated box leading to quality issue & scrap generation.
- More follow up from buyer in getting the material till it reaches the destination.
- Possibilities of material damage in transit & due to more material handling.
- Restricts more fluctuations in body trim in plan.
- Supply chain is little bit complicated because of involvement of third party logistics.
- No synchronizing at vendor end between production & supply of parts i.e. there is time lag.

In order to overcome above mentioned issues, it was necessary to find out what else would do the job. After successive discussion with other members from commodity, researchers conclude that the only option that can sort out all above mentioned problems is to start supply of all parts from vendor Chakan plant instead of vendor Nasik plant.

Researchers have discussed the entire subject with vendor with help of the concern buyer & convinced them to start supply from their Chakan plant by explaining the consequences of the switch over. They agreed in the same & acknowledge their consent.

Then there is need to follow Company standard procedure for this switch over, this process is known as EN – Engineering change Notice. Following is the process flow EN.



Terms involved in EN process are as follows:

- DCR – Design Change Request
- PPRF – Proto Parts Request Form
- FTR – Fitment Trial Run
- PTR – Production Trial Run

- PPAP – Production Part Approval Process
- PSW – Parts Submission Warrant

After successful completion of EN process, Vendor Chakan commenced supply of material to Vehicle Manufacturing Company.

Below are the major consequences observed after commencing supply from Chakan plant:

- Packaging Improvement
- Inventory reduction
- Freight cost reduction
- Less in transit damages
- Vendor code elimination

PACKAGING IMPROVEMENT

Packaging is the science, art, and technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of design, evaluation, and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells.

Vendor was supplying child parts through corrugated boxes from their Nasik plant. It is one time activity of supply through non returnable boxes as once it is used could not be recycled over period of time. From vendor Nasik to Company Chakan supply in returnable packaging is not possible because of the difficulties in movement of empty returnable bins from Company to vendor. There are chances of holding of material dispatches due to non availability of returnable bins at right time & at right location which may result into vehicle production loss which is not acceptable at all.

Consequences of these non returnable packaging are:

- It may causes quality issue to battery cables & wiring harnesses
- It is resulting into scrap generation at Company
- Unnecessary cost incurred in corrugated boxes.
- It becomes undesirable for material movement not only from Nasik to chakan but also during in plant material movement.
- Indirectly affecting environment due to tree cutting required for manufacturing of boxes

Supply from Chakan plant has reduced the considerable distance between vendor & customer from 250 km to 5 km. This has got simplified movement of empty bins from Company to vendor which is much easier task than earlier one. So vendor is supposed to commence supply of battery cables & wiring harnesses through returnable packaging i.e. Bins. They provided packaging sign off for each child part in standard format prepared by Company team, that packaging sign off was signed by vendor representative & by members of different departments viz. SCM, Production, Quality Assurance once it got finalized.

After successive completion of formalities, procurement of child parts through returnable bins started.

Change in INCO terms

Drawbacks of Ex-works are as follows:

- This system is little bit complex.
- It requires much follow up with transporter & driver by buyer which is hectic & non value adding task.
- Also cost associated in this transaction is more than actually required.
- There are possibilities of optimal utilization of vehicle capacity. Vehicles are not loaded to their full capacities.
- There is less synchronization between production at vendor end & dispatch of material resulting into time lag.

While INCO terms for vendor Chakan plant is free delivery so it is possible to overcome above mentioned drawbacks of Ex-works.
Below table furnishes the 'Transport Cost' Company is paying annually

Freight rate/ Trip	No of trips / Month	Freight cost / Month	Freight cost / Year
3000	10	30000	3,60,000

Hence, after shifting vendor to Chakan there would be saving of Rs. 360000 per year.

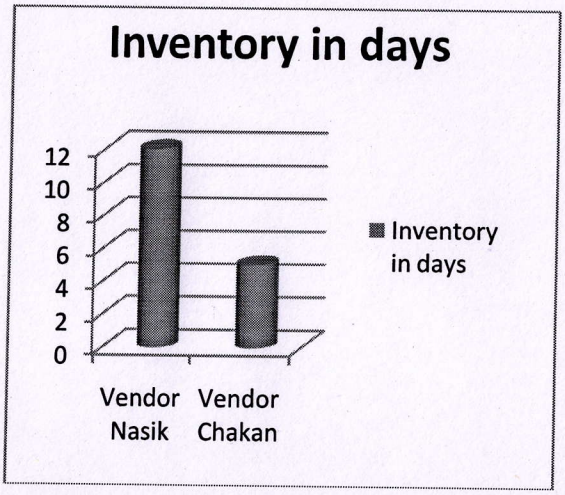
INVENTORY REDUCTION
In case of vendor Chakan there is different scenario, no of days & inventory value have been reduced marginally:

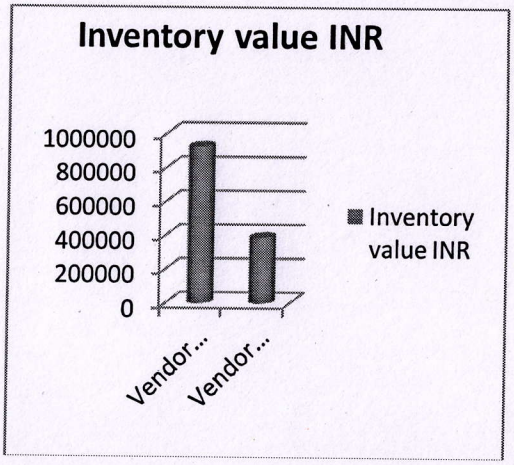
Part No	Description	Supplier	SS (days)	ITLT (days)	ILT (days)	VRT (Days)	Total
1401CA 0751N	BATTERY CABLE POSITIVE	Vendor-Pune	1.5	0.5	1	2	5
1401CA 0741N	BATTERY CABLE NEGATIVE	Vendor-Pune	1.5	0.5	1	2	5
1801CA 0480N	ROOF LAMP WIRING HARNESS	Vendor-Pune	1.5	0.5	1	2	5
1801EA0 160N	HMSL W/H	Vendor-Pune	1.5	0.5	1	2	5
0098780	EARTH CABLE -VE MDI SC/DC	Vendor-Pune	1.5	0.5	1	2	5

Part No	Description	Supplier	Total	ADD	Lower limit	MAP	Value
1401CA 0751N	BATTERY CABLE POSITIVE	vendor-Pune	5	250	1250	153.56	191950
1401CA 0741N	BATTERY CABLE NEGATIVE	vendor-Pune	5	250	1250	117.44	146800
1801CA 0480N	ROOF LAMP WIRING HARNESS	vendor-Pune	5	100	500	43.85	21925
1801EA0 160N	`HMSL W/H	vendor-Pune	5	100	500	28.16	14080
0098780	EARTH CABLE -VE MDI SC/DC	vendor-Pune	5	100	500	18.77	9385
						Total (Rs.)	**384140**

So due change in supply from Nasik to Chakan there is reduction in days as well as in inventory carrying value as shown in below table:

Supplier	Inv in days	Inventory value INR
Vendor Nasik	12	921936
Vendor Chakan	5	384140
Reduction	**7**	**537796**





FINDINGS: Once shifting supply of wiring harnesses from Nasik plant to Chakan plant there is lot of improvement in various parameters. Below table furnishes the before & after situations of parameters once commencing supply from Chakan plant:

Parameter	Before	After
Location	Nasik	Chakan
Distance	250 km	5 km
Inventory In Days	7	3
Inventory Value	Rs.921936	Rs.384140
Packaging	Corrugated	Returnable
INCO Terms	Ex-works	Free delivery
Transport Cost	Rs.3.6 lac/year	Rs. 0
In Transit Damage	More	Zero
Follow Up	More	Less

CONCLUSION The manufacturing industry in India as well as other parts of the world is witnessing the most challenging period it has experienced in recent history. However this is the time for these firms to have a close look at their operations. It is a time to initiate performance improvement programs without losing any more time. The case study shows that such initiatives will not only pay back but will help the organizations build much needed advantage over competition and retain profitability.

LIMITATIONS OF THE STUDY

1. Since this is a special activity, there was some restriction to share information.
2. Supply chain process becomes time consuming process and hence sometimes it affects on monthly targets also.
3. Before trying any method or technique proper knowledge is required otherwise wastage of raw material & other resources becomes greater cause of concern.

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"A Study of 'Consumer and Telecom Service Provider's Interface' In Pune City"

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ABSTRACT

Telecom industry is a crucial factor to realize the socio-economic objectives in India. The Indian Telecom industry is passing through a vibrant transitional phase and clearly undergoing the operation of market forces of demand and supply. The booming telecom industry has been attracting large amount of investments in India & is an important tool for socio- economic development for a nation.

The numbers of subscribers are very rapidly increasing and there is need to study the interface between telecom service providers and customers. To achieve the customer satisfaction there is need to analyze the customer's perception so as there should not be gap between the telecom service provider's performance and customer's perception.

The challenges in front of telecom service providers include attracting their subscribers by providing high quality of services with competitive charges for services. With the increase in the cost of acquisition of new customers, telecom service providers continually seek new ways to gain, retain and increase their existing subscriber base.

This study investigates the interface and may provide the telecom manager useful guidelines to understand their customer behavior. The study uses a survey of Pune city customers.

Keywords : consumer behavior, telecom service provider, brand image, service delivery, network experience

OBJECTIVES OF THE STUDY

1) To investigate the 'consumer and service provider' interface.
2) To study the brand image of service providers according to consumers.
3) To analyze the service delivery experience of consumers.
4) To understand the network experience about the service providers.

RESEARCH PROBLEM/STATEMENT OF PROBLEM

The number of telecom service providers and their subscribers are rapidly increasing. There is cut throat competition among service providers to retain existing customers and gaining new ones. To achieve customer satisfaction there is need to study behavior of consumers. There is facility of 'number portability' so now customers can easily change their existing service provider. The area of study includes network experience, service delivery experience of consumers also the brand image of the existing service providers.

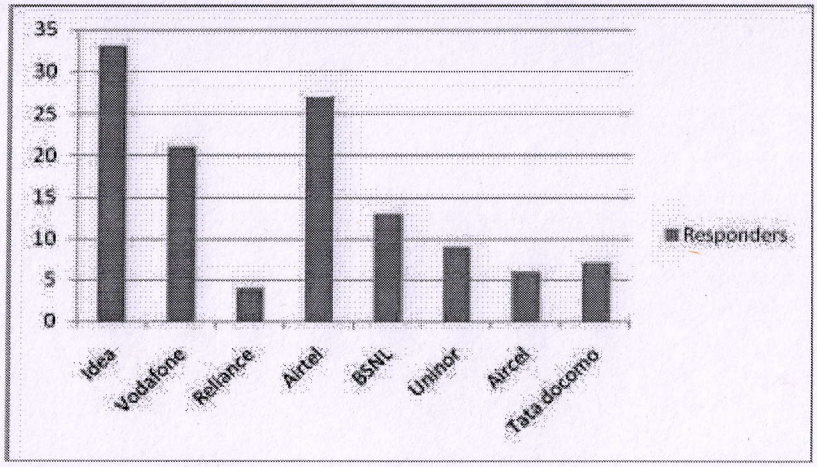
RESEARCH DESIGN

S. no.	Parameter	Description
1	Type of research	Descriptive Research
2	Research Instrument	Structured Questionnaire
3	Survey period	15 May to 15 July 2014
4	Type of product	Telecom Service
5	Universe	Population of Pune City
6	Population	All People who using telecom service in Pune City
7	Sampling Method	Non Probability Convenience Sampling
8	Primary sources	Questionnaire, observation, interview and field survey
9	Secondary sources	Book, Journal, Articles, Magazines
10	Measurable scale used	Nominal, Ordinal, Interval scale.
11	Rating Scale	Likert Scale 1 to 7 (1= Worst, 7 = Excellent)
12	Total Responders	120

DATA ANALYSIS & INTERPRETATION

Q. 1) Your Mobile Service Provider's Name.

	Idea	Vodafone	Reliance	Airtel	BSNL	Uninor	Aircel	Tata docomo	Total
Responders	33	21	4	27	13	9	6	7	120
Percentage	27.5	17.5	3.3	22.5	10.8	7.5	5.0	5.8	100 %

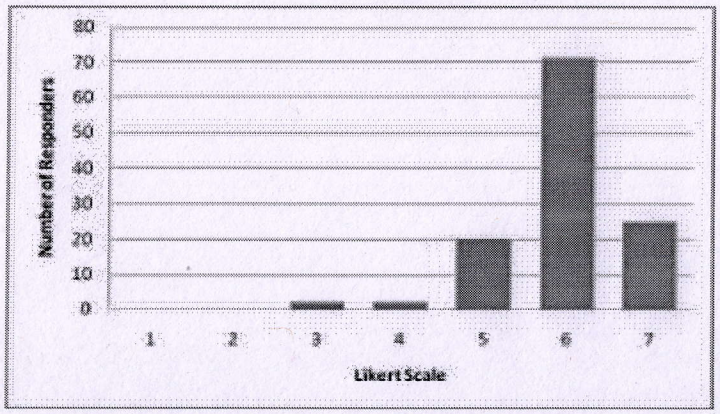


Interpretation :

In our survey we found that Idea, Ariel, Vodafone are top 3 Service Providers in Pune city.

Q. 2) Advertisements & Promotions of my operator provide true, relevant & complete information.

Scale	1	2	3	4	5	6	7	Total
Responders	0	0	2	2	20	71	25	120
Percentage	0	0	1.6	1.6	16.7	59.2	20.9	100 %

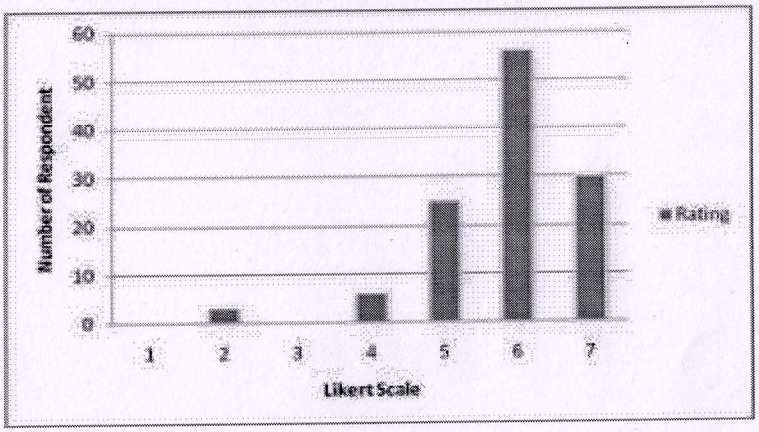


Interpretation :

Advertisement & promotion activities are important in conveying various offers and plans from operators to consumers. In our survey we found that operators provide necessary relevant information to consumers.

Q.3) My operator provides variety of offers that suits my needs.

Scale	1	2	3	4	5	6	7	Total
Responders	0	3	0	6	25	56	30	120
Percentage	0	2.5	0	5.0	20.9	46.6	25	100 %

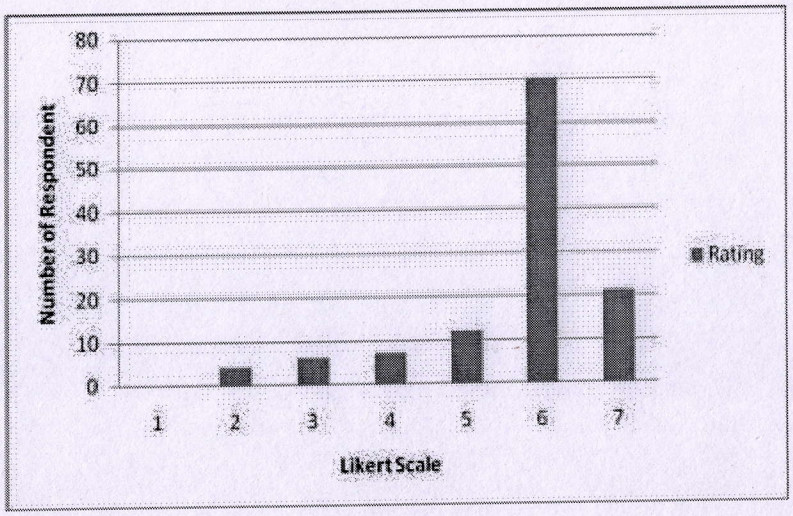


Interpretation :

All consumers' choice is special. Customer's choice is individually separate from other customer for example calling, SMS plans, and data service, night plans etc. Operator generally provides customized service. In our survey we found that the level of experience to the consumer is 'near to excellent' and at likert scale 6.

Q.4) I feel valued being associated with my operator.

Scale	1	2	3	4	5	6	7	Total
Responders	0	4	6	7	12	70	21	120
Percentage	0	3.3	5.0	5.8	10.0	58.3	17.5	100 %

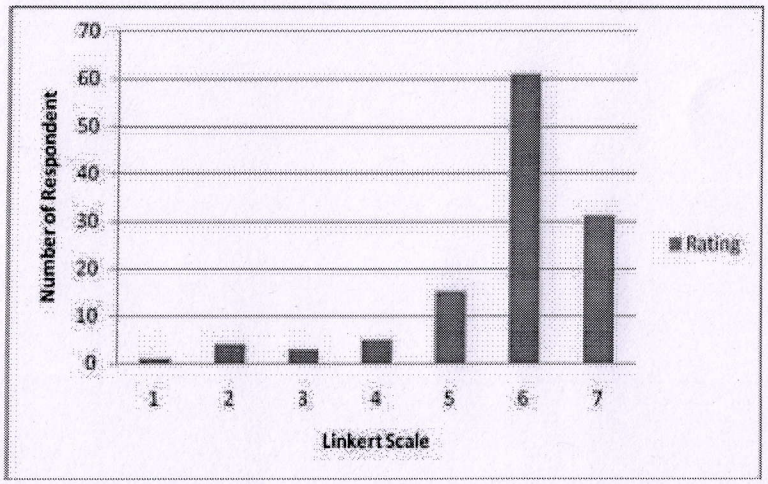


Interpretation :

Service Providers represents name or brand. There are top brands associated with results in consumer feel proud in being associated with their operators.

Q.5) My operator is trustworthy and reliable.

Scale	1	2	3	4	5	6	7	Total
Responders	1	4	3	5	15	61	31	120
Percentage	0.8	3.3	2.5	4.2	12.5	50.8	25.8	100 %

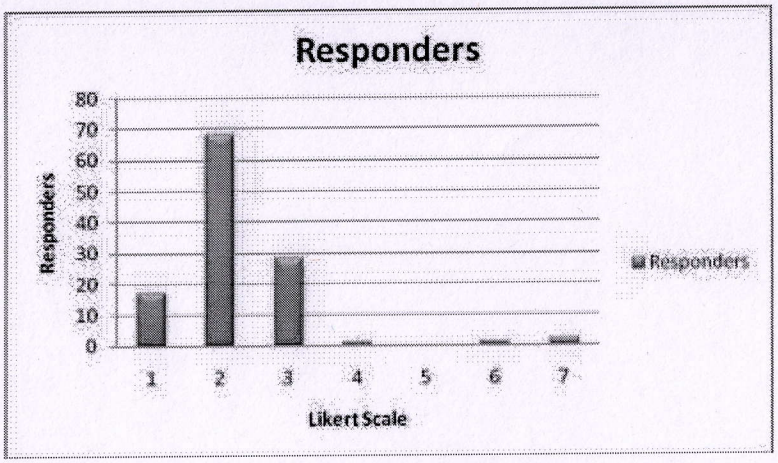


Interpretation:

Recently number portability is easily available for consumer, so they can easily switch to other service providers. In this scenario we found that most of the consumer feels that their operator is trust worthy and reliable. In our survey we found that operators are reliable and trustworthy.

Q.6) My operator is transparent and keeps me fully updated.

Scale	1	2	3	4	5	6	7	Total
Responders	17	68	28	1	0	1	2	120
Percentage	14.1	56.6	23.3	0.8	0	0.8	1.6	100 %

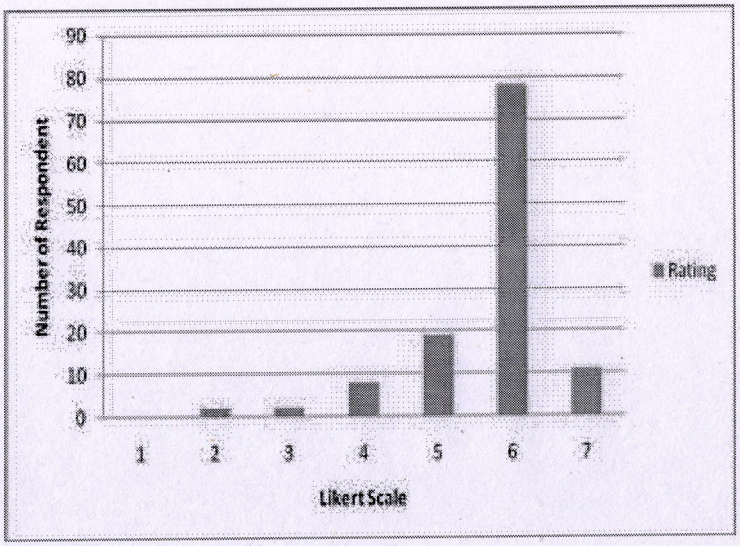


Interpretation :

There are various service offered by service providers like net pack, SMS pack etc. service providers need to be transparent in the area of new plans, bill shades and service outage etc In our survey we found that, service providers need to improve in this service and be more transparent.

Q.7) My operator consistently delivers all services.

Scale	1	2	3	4	5	6	7	Total
Responders	0	2	2	8	19	78	11	120
Percentage	0	1.6	1.6	6.6	15.8	65	9.1	100 %

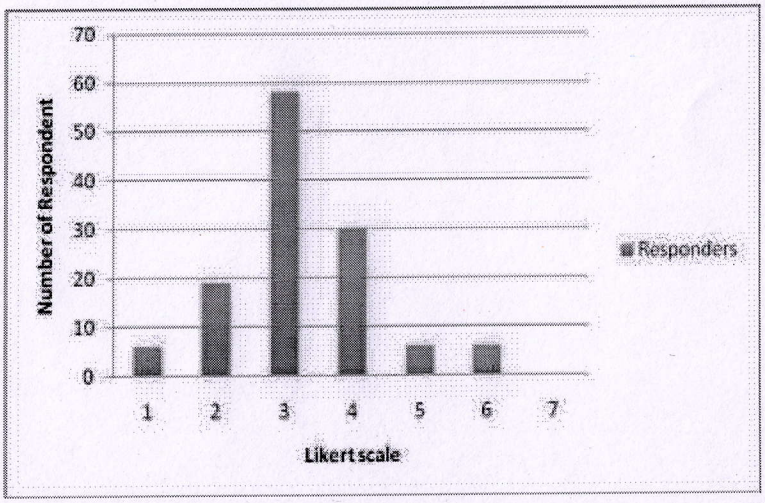


Interpretation:

Service as per commitment or as promised by provided by service

providers **Q.8) Pricing is competitive and provides value for money.**

Scale	1	2	3	4	5	6	7	Total
Responders	6	19	58	30	6	6	0	120
Percentage	5.0	15.8	48.3	25	5.0	5.0	0	100 %



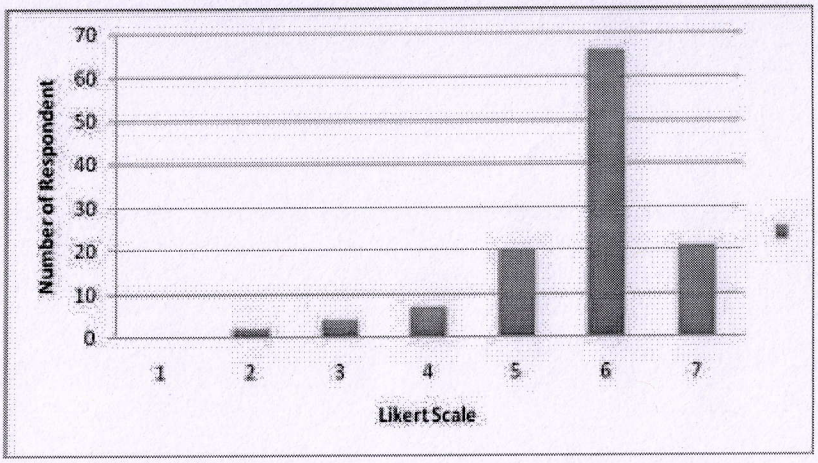
Interpretation:

There is variation in prices provided by telecom operators. Variation is there in message pack, net pack and local or STD calling rates. This price changes drastically from operator to operator.

We found that price must be competitive and should provide value for consumer money.

Q.9) My current tariff plan is clear and easy to understand.

Scale	1	2	3	4	5	6	7	Total
Responders	0	2	4	7	20	66	21	120
Percentage	0	1.6	3.3	5.8	16.7	55	17.5	100 %

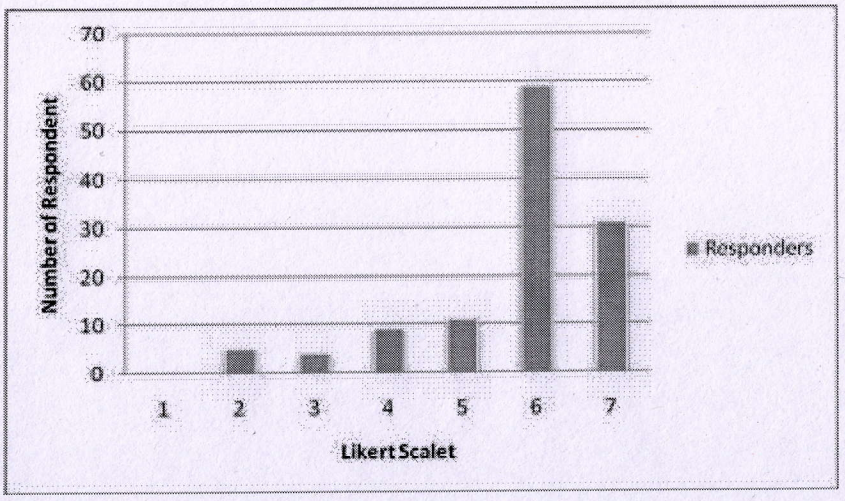


Interpretation:

Consumers are very much clear about their current tariff plan.

Q.10) My experience about 'purchase or change' in service.

Scale	1	2	3	4	5	6	7	Total
Responders	0	5	4	9	11	59	31	120
Percentage	0	4.2	3.3	7.5	9.1	49.1	25.8	100 %

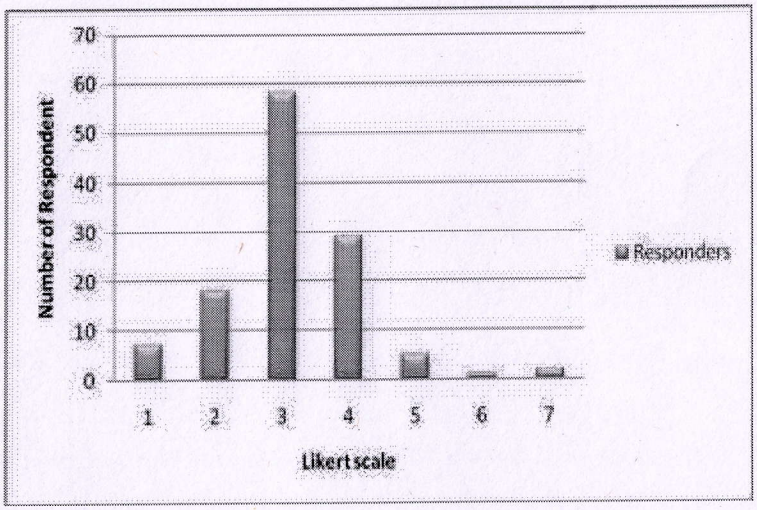


Interpretation :

Service providers are keen to sell their additional plans to consumer. In our research we found that service providers better service in purchasing or change in service.

11) My operator's quality of Indoor Network Coverage.

Scale	1	2	3	4	5	6	7	Total
Responders	7	18	58	29	5	1	2	120
Percentage	5.8	15	48.3	24.1	4.2	0.8	1.6	100 %

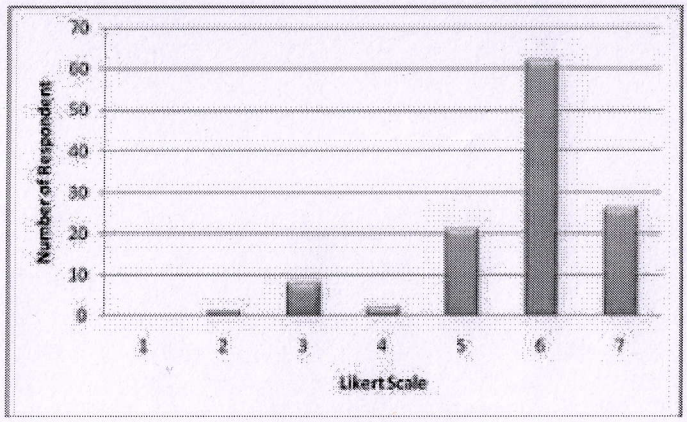


Interpretation:

There is scope of improvement in quality of indoor network coverage as we found that service providers are lacking in this area of service.

Q.12) My operator's quality of Outdoor Network Coverage and also while travelling or roaming.

Scale	1	2	3	4	5	6	7	Total
Responders	0	1	8	2	21	62	26	120
Percentage	0	0.8	6.6	1.6	17.5	51.6	21.6	100 %

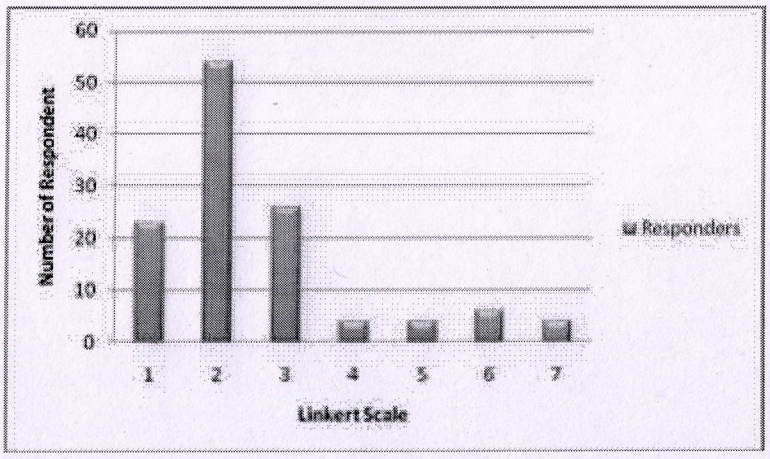


Interpretation :

In our survey we found that, consumer are happy about the operator's quality of outdoor network coverage.

Q.13) Call Connectivity Experience.

Scale	1	2	3	4	5	6	7	Total
Responders	23	54	26	4	4	6	4	120
Percentage	19.1	45	21.6	3.3	3.3	5.0	3.3	100 %

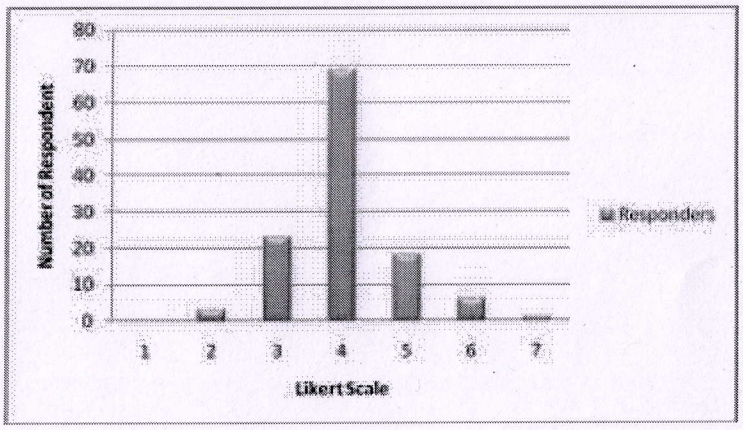


Interpretation :

Many times consumers face problem like long time to connect, frequent beeps while trying to dial etc. this also includes people period like New Year's event or festival days. We found that there is need to improve in this area.

Q.14) Call Quality Experience.

Scale	1	2	3	4	5	6	7	Total
Responders	0	3	23	69	18	6	1	120
Percentage	0	2.5	19.1	57.5	15	5.0	0.8	100 %

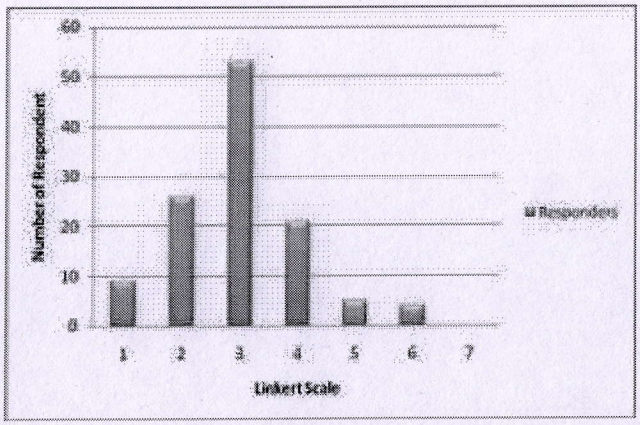


Interpretation:

Consumer do face problem like no call drops, free from disturbance, echo, cross connections etc. we found that consumer are not that much satisfactory about call quality provided by operator.

Q.15) Data service experience.

Scale	1	2	3	4	5	6	7	Total
Responders	9	26	53	21	5	4	0	120
Percentage	7.5	21.6	44.1	17.5	4.2	3.3	0	100 %

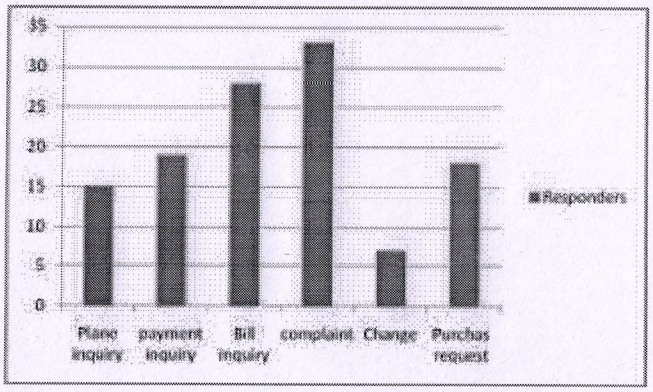


Interpretation:

Especially in evening and Saturday, many of the consumers do face problem like lack of connectivity in call and internet service.

Q.16) In Past 6 months, for which issue(s) have you contacted the operator?

	1	2	3	4	5	6	Total
	Plane inquiry	payment inquiry	Bill inquiry	complaint	Change	Purchas request	
Responders	15	19	28	33	7	18	120
Percentage	12.5	15.8	23.3	27.5	5.8	15	100 %

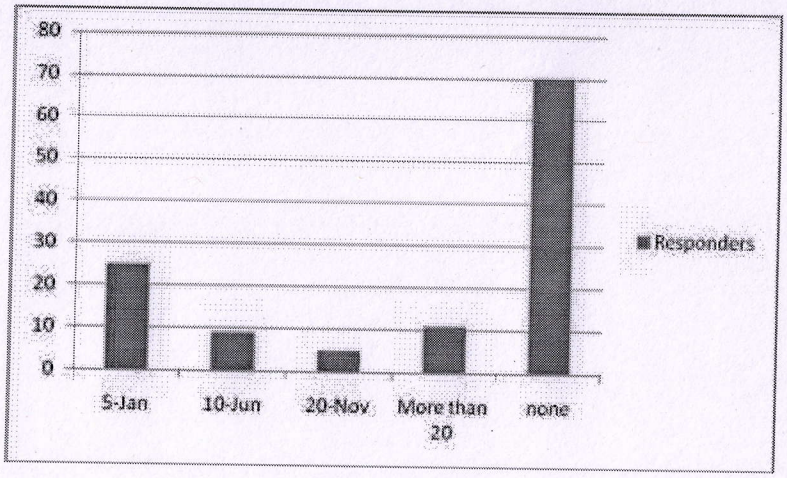


Interpretation:

In our survey we found that, maximum times consumer are contacting their operators for the purpose of their complaints followed by Bill enquiry.

Q.17) How many times have you approached your operator in the past 6 months?

	1	2	3	4	5	Total
	1-5	6-10	11-20	More than 20	none	
Responders	25	9	5	11	70	120
Percentage	20.8	7.5	4.2	9.1	58.3	100 %

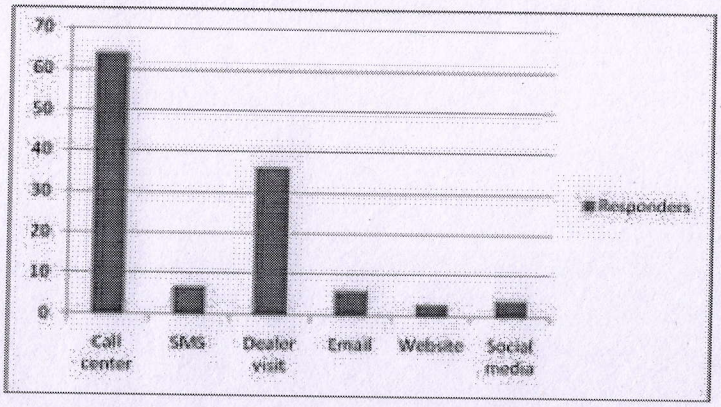


Interpretation:

In our survey we found that frequency of consumer of meting their operator is less.

Q.18) Which chanel (s) you used?

	1	2	3	4	5	6	Total
	Call center	SMS	Dealer visit	Email	Website	Social media	
Responders	64	7	36	6	3	4	120
Percentage	53.3	5.8	30	5.0	2.5	3.3	100 %

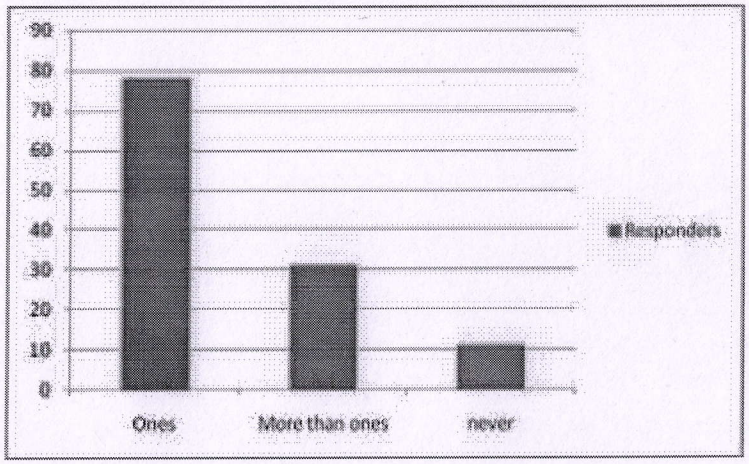


Interpretation :

Consumer are using the option of call center to contact their operator followed store and dealer visit and SMS.

Q.19) How many times did you need to follow up for the same issue?

Scale	1	2	3	Total
	Ones	More than ones	never	
Responders	78	31	11	120
Percentage	65	25.8	9.1	100 %

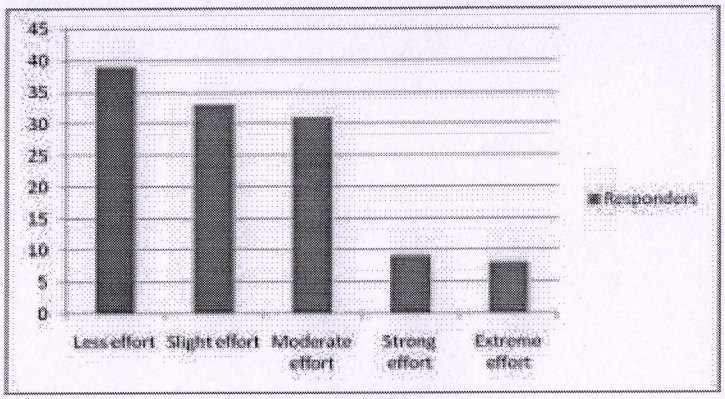


Interpretation :

For the follow up purpose of the same issue or complain, consumer experience is good as maximum customers need to contact just once.

Q.20) On a scale of 1-5, rates the amount of effort you had to put to solve your queries/ requests/complaints.

Scale	1	2	3	4	5	Total
	Less effort	Slight effort	Moderate effort	Strong effort	Extreme effort	
Responders	39	33	31	9	8	120
Percentage	32.5	27.5	25.8	7.5	6.6	100 %

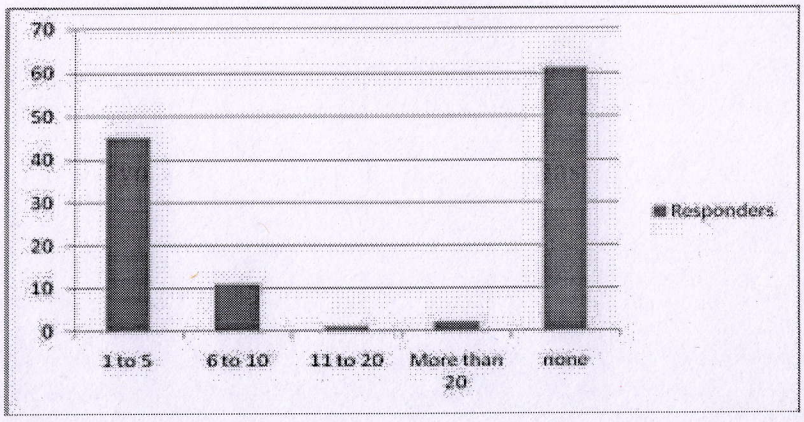


Interpretation:

The amount of effort consumer put to solve their queries or requests are slight effort.

Q.21) How many times you have raised complaints in past 6 months ?

	1	2	3	4	5	Total
	1-5	6-10	11-20	More than 20	none	
Responders	45	11	1	2	61	120
Percentage	37.5	9.1	0.8	1.6	50.8	100 %

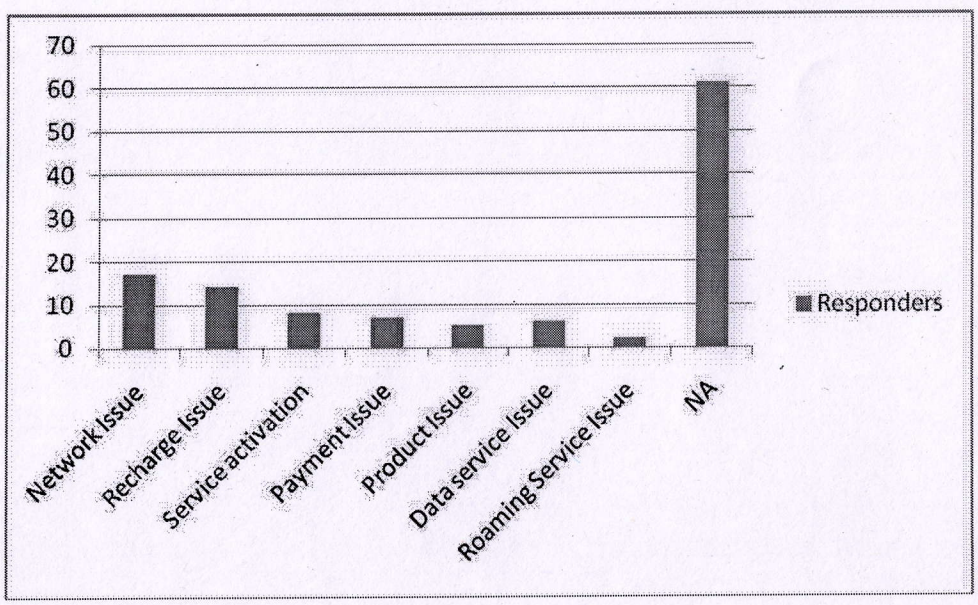


Interpretation :

In our survey we found that many consumers have never raised any sort of complaints in past 6 months.

Q.22) Regarding which issue you raised the complaint?

	1	2	3	4	5	6	7	8	Total
	Network Issue	Recharge Issue	Service activation	Payment Issue	Product Issue	Data service Issue	Roaming Service Issue	NA	
Responders	17	14	8	7	5	6	2	61	120
Percentage	14.1	11.66	6.6	5.8	4.2	5.0	1.6	50.8	100 %

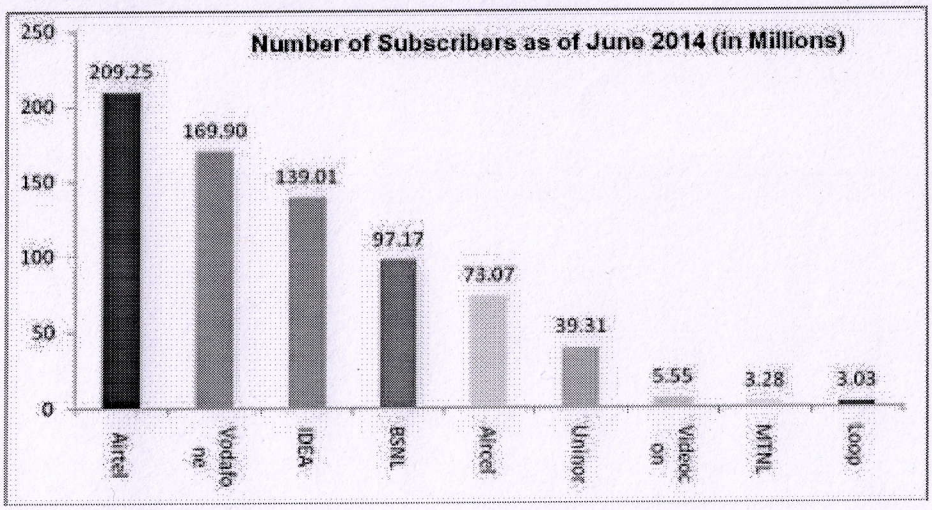


Interpretation:

Nearly 50% of the total responders never raised the complaints till date.

Maximum complaints raised by consumers are about network issues followed by recharge issues and service activation issues.

SECONDARY DATA INTERPRETATION



[Source: http://www.coai.com/]

Interpretation:

GSM SUBSCRIBER FIGURES JUNE-2014	
1	Total number of GSM Subscribers as of June 2014 - **739.57 million**
2	The GSM Subscribers increased by **6.48 million** in June 2014 (**0.88% increased** from previous month)
3	Maximum GSM Subscribers **- Airtel - 209.25 million**

CONCLUSION

This study investigates the interface between consumer and telecom service providers. Researchers found that the brand image of the service providers is near to excellent according to consumer's perception as maximum customers feel proud and feel that their operators are reliable and trustworthy. There is scope of improvement in call connectivity and service delivery area in pricing, indoor network coverage, call quality, connectivity & data service.

LIMITATIONS OF THE STUDY

1) Time period of the report was limited for two month only.

2) Some data is confidential due to we cannot take actual figure for to do proper research study.

3) The sample of 120 respondents may constitute a limitation due to its smallest nature of sample.

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Employee Retention through Employee Engagement : Study Special reference with Retail Shoppe in Pune

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Abstract

Employee engagement leads to commitment and psychological attachment and reflects in the form of high retention (low attrition) of employees. The level of engagement in employees can be enhanced by identifying its drivers (influential factors) and work on them. For the purpose of study, the drivers of the employee engagement are identified and hypotheses have been formulated. The relationship between employee retention and employee engagement is examined from the response to separate questionnaires from 100 employees from different retails Shoppe like DMart, CROMA, BigBazar, Central Malls, Season Mall who are chosen based on random sampling.

The object of research paper study is to finds that the employee retention can be improved by increasing the level of employee engagement and focusing on few non-financial drivers. Practical implication of this study is the retention can be improved without financial expenditure when there are economic constraints. Organizations can design good practices in the light of findings to retain their best talent (highly skilled and specialized human resources) without much financial burden.

Key words : Employee Engagement, Employee Retention, Employee Satisfaction, Financial Benefits, Non Financial Benefits.

INTRODUCTION

Background of Study :

We've seen it happen many times. An organization that provides top wages and benefits loses a great employee to a competitor for no apparent reason. Of course, some employee turnover is to be expected, but if your company is truly engaging your employees, there is no good reason for the unexpected loss of quality staff members. Many companies already know that wages and

benefits are important to employees, but compensation alone is not enough to keep the highly skilled, motivated and experienced workforce your business needs to excel.

About Retails :

Retail is the sale of goods and services from individuals or businesses to the end-user. Retailers are part of an integrated system called the supply chain. A retailer purchases goods or products in large quantities from manufacturers directly or through a wholesale, and then sells smaller quantities to the consumer for a profit. Retailing can be done in either fixed locations like stores or markets, door-to-door or by delivery. In the 2000s, an increasing amount of retailing is done using online websites, electronic payment, and then delivered via a courier or via other services.

Retailing includes subordinated services, such as delivery. The term "retailer" is also applied where a service provider services the needs of a large number of individuals, such as for the public. Shops may be on residential streets, streets with few or no houses or in a shopping mall. Shopping streets may be for pedestrians only.

Retail Sector & Pune :

Pune has come a long way in recent times. The thriving IT market, automobile boom, strong student community, rising service sector, robust estate market and increase in the number of professionals have led to a sharp expansion of the city. This rapid urbanization, and the new demands of Pune's global citizens, has led to a rise in the number of malls, offering high-end brands.

The retail sector in Pune was earlier confined to a few markets which were unorganized, chaotic and crowded. In the last two years, however, the rise in modern retail outlets can be seen across the city. Koregaon Park Plaza, Inorbit, Phoenix Market City, Pulse, Kumar Pacific Mall and Amanora Town Center are the new ones that have joined the already existing malls like Jewel Square, S.G.S Mall, Mariplex, Central and Ishanya, to name a few. In a scenario where five malls have opened in the last one year. In Pune city presently 24/25 malls are available in different city of Pune.

Objective of Research :

To Understand, Analyze & find that the employee retention can be improved by increasing the level of employee engagement and focusing on few non-financial drivers.

REVIEW OF LITERATURE

Employee engagement-Meaning & definitions Employee engagement is defined as employees' willingness and ability to help their company succeed, largely by providing discretionary effort on sustainable basis (Perrin's Global work study, 2003). Another study (Scarlett survey) views it as measureable degree of an employees' emotional attachment to their job, colleagues and

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organization that profoundly influences their willingness to learn and perform at work. The employee engagement is an emergent working condition and a positive cognitive, emotional and behavioral state directed toward organizational outcomes (Shuck & Wollard, 2009). Gallup (which is known as authority on employee engagement) relates employee engagement to a positive employee's emotional attachment and employee's commitment (Demovsek D, 2008). Thus the employee engagement make employees emotionally bonded to their organization and tend them to become passionate about their work and hence results in improvement of employee retention.

Impact on Employee Retention Employees are assets of any organization and organization always try to avoid losing the key performers. Employee retention can be defined differently as per the context of its usage. It can be represented mathematically in percentage such as retention level is 87%, which means the organization could keep its 87% of its employees with them for a specified period which is normally taken as a year. In other context employee retention refers to the ability of an organization to retain its employees. In this case the employee retention is considered as a strategy, based on the effort by which the organization attempts to retain the employees. Employee retention involves taking measures to encourage employees to remain in the organization for the maximum period. Whereas retention management has become major source of competitive advantage in the modern rapidly globalizing business world (Vaiman, 2008).Randenbush, S.W. &Bryk, A.S. (2002) argue that the employee turnover affects family, organization and society. It brings stress in family as relocation of family and employee will become necessary and financially related issues in connection with the relocation also arise. For organization it may lead to disruption of service to clients and dissatisfaction of employees due to extra workload. When an employee with critical skills to support the society leaves the organization, it impacts the society badly. With retention a growing concern for organizations, understanding the factors that drive commitment and loyalty among employees is essential for managing increasing turnover risk in the months and years ahead, (Mark Royal, Hay Group News release, 2011). As per Corporate Leadership Council report (2008) the highly engaged organizations have the potential to reduce the staff turnover by 87%, the disengaged are four times more likely leave organization than average employees. It was observed that the employee retention can be improved by improving employee engagement.

Role of HRM in Employee Engagement & Retention:

Human Resources Management (HRM) play important role in retention of employees.HR managers have to identify the right retention strategies which their employees perceive to be effective. Good HRM practices in the area of compensation, reward, career development, supervisors' support, and culture and work environment can help to improve retention (Meyer

and Allan, 1991; Solomon, 1992; Snell and Dean, 1992). Many organizations now utilize extensive range of human resources management factors that influence employee commitment and retention (Stein, 2000; Beck, 2001; Clarke, 2001; Parker and Wright, 2001). According to them, the factors which influence employee retention are work environment, supervisor support, organization image, employee value match, remuneration, reward and recognition, employees' career development etc.Hay Group study(2011) has identified five key factors that differentiate "stayers" (those committed to the company more than two years) from "leavers" (those planning to leave in two years or less).The key factors are confidence in the organization and leadership, room for employees to grow, a fair exchange between organization and employee, an environment for success and authority and influence. Factors influencing engagement include work environment, rewards and recognition, career development, supervisor/leader, compensation/remuneration, and employee- organization value match.

Work environment is considered one of the most important factors in the employee retention (Zeytinoglu & Denton, 2005) and people strive to work and to stay in those corporations that provide good and positive work environment (Ramlal 2003). Study by Wiesenberger and Associates (1993) suggest that employees' view regarding organization is strongly concerned to their relationship with supervisor. Recognition from bosses, team members, co-workers and customers enhance the loyalty and retention. Several studies have highlighted the linkage between rewards and employee retention and it has been the most I important factor for attracting and retaining the talent (Williams and Dreher, 1992; Watson Wyatt, 1999; Willis, 2000; Tower Perrin, 2003; Mercer, 2003). Career development is also very important for employee retention. Employees are keen to advance in their career, organization desires to strengthen their bond with employees must spend on development of employees (Hall & Moss, 1988). Study by Prince (2005)also advocates that to gain competitive advantage, organization requires talented and productive employees and the latter need career development to enhance and cultivate their competencies.Freyermuth (2007) also recommends that the organization must groom leaders to support the employees and to build the work environment where workers want to stay.

RESEARCH METHODOLOGY :

- Scope, Sample & Methodology:

Area of the study is a different Retail Malls / Shopee available in Pune area. In Pune 24 total malls / shopee's available, whose employee strength is near about 3000. Only 5 malls were targeted for the research & from that I selected 100 employees, distributed questionnaire to all got reply from 78 employees. Sample size took for this research is 78. Random sampling technique used for research.

- Research period : From 2010 – 2013 for evaluating Non financial drivers .
- Drivers of the Employee Engagement:

Initially few drivers of employee engagement were identified with help of literature review. Based on the impact analysis, followings drivers were shortlisted like drivers of engagement, communication, rewards & recognition, compensation and benefits, manager/supervisor relationship, career development, teamwork, role clarity, work environment and work life balance, action plans are drawn and implemented only for drivers with non-financial support. Many action plans were implemented on these drivers - communication, rewards & recognition, manager and supervisor relationship, teamwork, role clarity and work environment, few of them to mention are on spot appreciations, green cards, silver cards, star of the month, town hall meetings, skip level meetings, one to one meetings, CEO'monthly meetings, open door policy, department steering committee meetings, internal coordination committees, team activities, team building exercises, reporting channel streamlining, induction of HR buddy to each department to improve the HR process and HR helpdesk etc. Questionnaires were classified in four groups.

- Hypotheses :

HO (Null Hypothesis) : There is no significant impact of implementation of action plans for non-financial drivers to the level of engagement of employees.

H1 : There is significant improvement in the level of employee retention due to increase in the level of employee engagement.

The hypotheses have been tested and the results have been arrived at.

- Data sources: Quantitative research technique is used and this study is descriptive in nature. Both primary and secondary data have been used in this study. Primary data was collected through a questionnaire and secondary data was collected from documentation section of each department.
- Instrument Development

Even though a number of instruments are available that measure the retention level of employees, they are not customized for retails sector. After long discussions with senior management team and representatives from shops, following are influencing factors of retention were identified. Then in response to exit interview questions the influencing factors were analyzed. Based on analyses discussions the final questionnaire for evaluating the retention was formed. As the focus of the study is on improving retention through employee engagement, the level of employee engagement was also evaluated.

- Reliability Test : The data collected thorough questionnaire was subjected to reliability test, which shown strong internal consistency among the given items and hence satisfied.
- Data collection After preparing both questionnaires the data was collected for finding out the initial level of engagement and retention of employees. After this asked, to the manager of the retail shopee to implement many engagement boosting activities. Manager was implemented on the drivers which don't require financial support. The hypotheses have been formulated for the purpose of the study. The result was studied in comparison with original scores and the hypotheses were tested.
- Data analysis Initial levels of engagement of employees were evaluated from the response given by the 100 employees from 5 malls to the questionnaire which contains four parts. Similarly the initial levels of employee retention also were evaluated by administrating another questionnaire with four parts. Change in the level of employee engagement was evaluated after implementing the action plans decided in the expert and management meeting. Paired t-test used to test the hypotheses.
- Limitation of the study is that it has not gone in details to analyze the impact of each drivers separately, instead had a holistic approach.

RESULTS AND DISCUSSIONS

The data obtained is subjected to statistical testing and the results obtained were analyzed and the discussions follow.

Impact of Morale boost plans /non-financial drivers on employee engagement H1: There is no significant impact of implementation of action plans for non-financial drivers to the level of engagement of employees. From the following data analysis & interpretation, null hypothesis H1 rejected. This means, there is a significant association or impact of the implemented action plans to the level of engagement of employees. Even though the implemented action plans were only addressed the non-financial drivers of employee engagement it has made a significant improvement in the level of employee engagement.

Impact of the employee engagement on employee retention. H1: There is significant improvement in the level of employee retention due to increase in the level of employee engagement (H1).

1. FIGURES AND TABLES

Table 1: Drivers of Employee Engagement

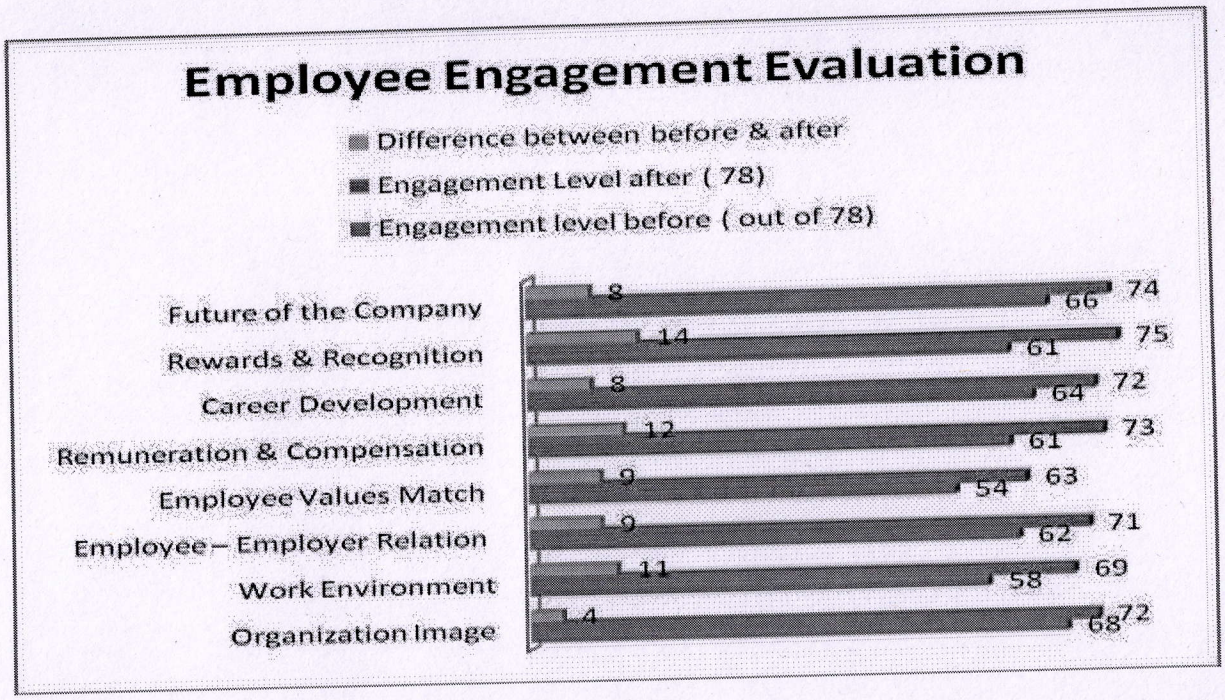
Sr. No	Main Drivers	Selected Drivers
1	Communication	Communication
2	Rewards & Recognition	Rewards & Recognition
3	Manager / Supervisor relationship	Manager / Supervisor Relationship
4	Teamwork	Teamwork
5	Role Clarity	Role Clarity
6	Work Environment	Work Environment
7	Career Development	
8	Compensation & Benefits	
9	Work Life Balance	

Table No 2 : Main Factors influencing Retention of Employee

Sr. No	Influencing Factors (By Different Studies)	Selected Factors (Based on Exit Interview)
1	Organization Image	Organization Image
2	Employee – Organization Value Match	Work Environment
3	Remuneration & Compensation	Employee – Employer Relation
4	Work Environment	Employee Values Match
5	Relation between Manager & Employee	Remuneration & Compensation
6	Career Development	Career Development
7	Job Security	Rewards & Recognition
8	Decision taking power	Future of the Company
9	Flexi timing	
10	Work Content	
11	Personal Factors	
12	Future of the Company	

Table. No 3: Employee Engagement Level Evaluation

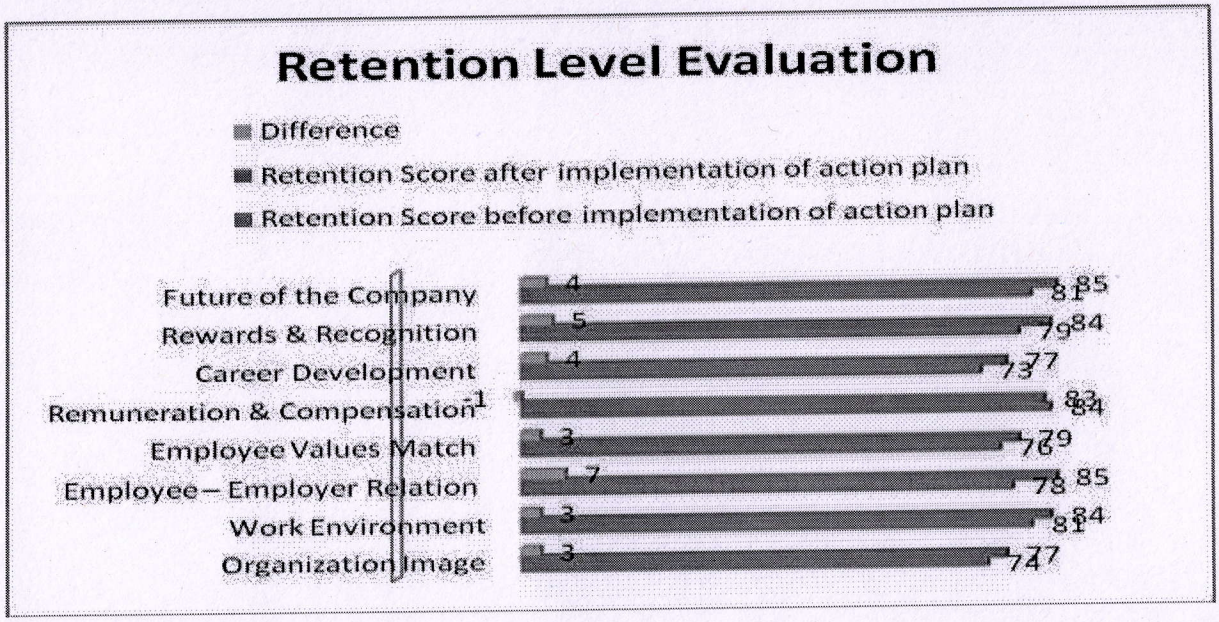
Sr. No	Engagement Factors	Engagement level before (out of 78)	Engagement Level after (78)	Difference between before & after
1	Organization Image	**68**	**72**	**4**
2	Work Environment	**58**	**69**	**11**
3	Employee – Employer Relation	**62**	**71**	**9**
4	Employee Values Match	**54**	**63**	**9**
5	Remuneration & Compensation	**61**	**73**	**12**
6	Career Development	**64**	**72**	**8**
7	Rewards & Recognition	**61**	**75**	**14**
8	Future of the Company	**66**	**74**	**8**



Interpretation : Table shows that the difference between before & after of engagement level of employee for their retention evaluation.

Table No. 4 Retention Level Evaluation (Employee Perceived Score)

Sr. No	Engagement Factors	Retention Score before implementation of action plan	Retention Score after implementation of action plan	Difference
1	Organization Image	74	77	3
2	Work Environment	81	84	3
3	Employee – Employer Relation	78	85	7
4	Employee Values Match	76	79	3
5	Remuneration & Compensation	84	83	-1
6	Career Development	73	77	4
7	Rewards & Recognition	79	84	5
8	Future of the Company	81	85	4



Interpretation : Above table shows that the retention scores – employee perceived before & after implementation of action plan for the employees.

CONCLUSION

The present study conducted in light of high employee turnover rate in retail sector. The study brought out how employee retention can be improved by improving engagement level of employees. There was statistical evidence in the study to confirm that the employee retention can be improved by addressing non-financial drivers of employee engagement like communication, recognition, employee-employer relationship, work environment, future of the company, career development Therefore it has given a very positive message that even without financial expenditure the employee engagement and hence retention can be improved. As such the future studies can be conducted in two directions: one to find the impact of non-financial drivers on the employee engagement and retention and the other to include financial drivers of employee engagement and have an elaborate study of the impact of engagement drivers on employee engagement and retention.

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Inventory Control by Kanban Based Pull System Implementation

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ABSTRACT

Business organizations today are facing great competitions & challenges as the economy is growing. The growth & the downfall of the company depend upon how it uses its resources. There is need to control Inventory and Smooth Flow of Information.

In manufacturing industry, almost 60% of total cost is constituted by the inventory. Kanban system which is one of the tools to maintain inventory at optimum level is used in various man-ufacturing organizations. This system helps in fulfilling all the above mentioned characters, that is, it provides smooth flow of information, 'pull technology' in production (material movement) and hence helps in maintaining the inventory at optimum level.

Kanban system has been implemented and observed firstly for 8O43 piston line, which is re-lated to power steering product. Also after gaining positive results from the system at 8O43 piston line as well as positive feedback from top management, there was a time to give training to other cell leaders and operators related to different part's cells to implement the system suc-cessfully there and for achieving positive results in return.

Keywords : KANBAN, Pull system, Inventory Control, Kanban Cards]

CONCEPTS

Kanban is a scheduling system for lean and just-in-time(JIT) production. Kanban is a system to control the logistical chain from a production point of view, and is not an inventory control system.

Kanban was developed by 'Taiichi Ohno', at Toyota, as a system to improve and maintain a high level of production. Kanban is one method through which JIT is achieved.

Kanban became an effective tool in support of running a production system as a whole and it proved to be an excellent way for promoting improvement. Problem areas were highlighted by reducing the number of kanban in circulation. One of the main benefits of Kanban is to establish

an upper limit to the work in progress inventory, avoiding overloading of the manufacturing system.

Kanban Origins

In the late 1940s, Toyota started studying supermarkets with the idea of applying shelf-stocking techniques to the factory floor. In a supermarket, customers obtain the required quantity of product at the required time; no more and no less. Furthermore, the supermarket stocks only what it expects to sell within a given time frame, and customers take only what they need, since future supply is assured.

Taiichi Ohno stated that to be effective, kanban must follow strict rules of use. Toyota, for example, has six simple rules, and close monitoring of these rules is a never-ending task, thereby ensuring that the Kanban does what is required.

Kanban Cards

Kanban cards are a key component of kanban and they signal the need to move materials within a production facility or to move materials from an outside supplier in to the production facility. The kanban card is, in effect, a message that signals depletion of product, parts or inventory that, when received, the kanban will trigger the replenishment of that product, part or inventory.

Consumption therefore drives demand for more production, and demand for more products is signaled by the kanban card. Kanban cards therefore help create a demand-driven system. Kan-ban cards, in keeping with the principles of kanban, simply convey the need for more materials. A red card lying in an empty parts cart conveys that more parts are needed.

The Contents of the Kanban

Kanban	Part Name	Part Number	Kanban Number
Work Station (From)	Work Station (To)	Quantity	Container Number

No. of Kanban cards = (Expected demand during lead time + Safety stock) / Size of the container.

The Kanban system is flexible system. This system can be easily adjusted to fit the current way. The system is operating because card sets can be easily added or removed from the system. If the workers find that are not able to consistently replenish the item on time, an additional con-tainer of material with the accompanying Kanban cards can be added. If it is found that excess containers of material accumulate, card sets can be easily removed thus reducing the amount of inventory.

Advantages of Using the Kanban System

- Flexibility
- Focus on continuous delivery
- Reduction of wasted work / wasted time
- Increased productivity & efficiency
- Team members' ability to focus

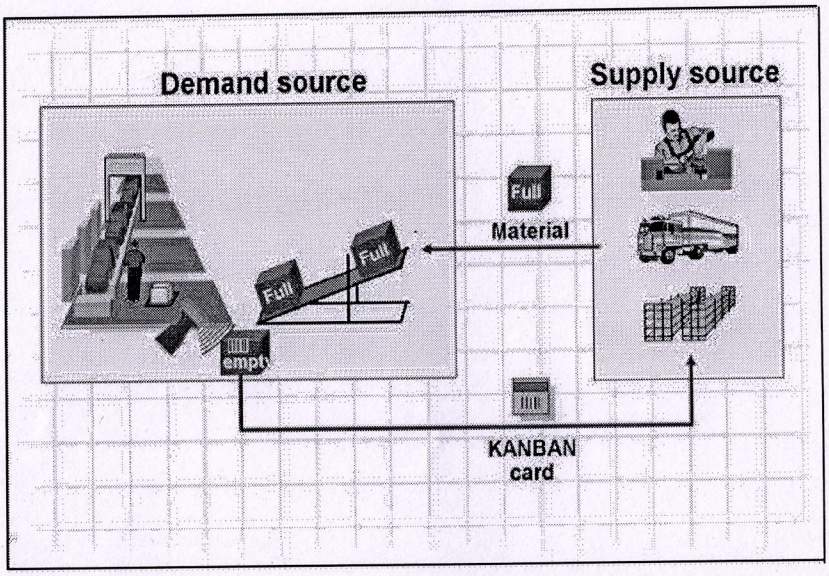


Figure: Operating principle of Kanban System

OBJECTIVES OF THE STUDY

1. To study the current inventory & production system.
2. To design the Kanban card for flow of information.
3. To implement Kanban card to convert present push system of material movement into pull system.

RESEARCH PROBLEM AREA

Economists and business analysts alike have long recognized the central role played by swings in inventory accumulation during cyclical contractions in the economy. The importance of understanding inventory behavior cannot be overstated when analyzing business cycles. Although it is easy to see how inventories are important in cyclical fluctuations, other aspects of inventory behavior remain poorly understood. For example, to what extent have firms lived up to much

lauded "just-in-time" inventory management techniques? If inventory holdings truly have fall-en, what does this imply about the role of inventories in future cyclical fluctuations?

One such tool used to control the inventories is Kanban system. The Japanese refer to Kanban as a simple parts-movement system that depends on cards and boxes/containers to take parts from one work station to another on a production line.

The essence of the Kanban concept is that a preceding process should only deliver components to the succeeding process as and when they are needed, so that there is no storage in the produc-tion area. Within this system, workstations/store along production lines only produce/deliver desired components when they receive a card's signal and an empty container, indicating that more parts are needed in production. In case of line interruptions, each work-station will only produce enough components to fill the container and then stop. In addition, Kanban limits the amount of inventory in the process by acting as an authorization to produce more inventories.

Since Kanban is a chain process in which orders flow from one process to another, the produc-tion or deliveries of components are pulled to the production line, in contrast to the traditional forecast oriented method where parts are pushed to the line. An attempt has been made in this project to understand and implement the Kanban system in inventory control so as to make sure that components flow as well as information flow should be smooth to meet the requirements of the shop floor. So to overcome these problems, this topic was selected.

RESEARCH DESIGN

S N	Parameter	Description
1	Type of research	Analytical Research
2	Nature of Research	Quantitative
3	Sources of data collection	Primary and Secondary sources
4	Primary sources	Observation, interview and field survey
5	Secondary sources	Books, Journals, Articles, Magazines Company Data Sheets
6	Data interpretation	Mathematical Calculations using formulas.

DATA ANALYSIS & INTERPRETATION

Before implementing the Kanban system, study of their present manufacturing process, ma-chines, the types of parts they were manufacturing, the types of parts they were outsourcing etc was done. At initial stage, researchers concentrated on a product called power steering. For

manufacturing power steering cellular manufacturing process was being used. Cellular Manufacturing is based on the principle of Group Technology.

By studying present scenario of production, researchers found that the technology they were using for movement of components or materials or parts was Push technology. It means that the moment parts were manufactured by the preceding process; they were got delivered to suc-ceeding process. Though there was no requirement of parts at succeeding process, it was got delivered by the preceding process.

The safety inventory they were maintaining at shop floor is quite less than that of heat treatment plant, because heat treatment plant was having operations like Hardening and Carburizing, which were having cycle time of 12hours and 36 hours respectively.

Due to such long cycle time they were keeping large amount of safety stock for heat treatment plant. As it has already said that the number of inventory they were maintaining was totally flexible quantity and it was varying according to the monthly predicted demand of product (e.g. 8O43 power steering) by customers.

To Design the Kanban Card for Smooth Flow of Information

Use of Pull technology principle and card mechanism of Kanban system will help in overcoming the above mentioned weaknesses of the production practices in the company. Hence, researchers started to implement Kanban system for power steering. As it has mentioned that power steering is a combination of various parts like, piston, nut, worm, end cover etc. research-ers took first piston part for implementation of Kanban system because of its complex nature of manufacturing.

Also, there were three types of piston which are 8O43 piston, MO33 piston and 8O33 piston. Because of the more demand, 8O43 piston was selected. Initial stage of implementing the Kan-ban system, is to design a Kanban card. With the help of discussion with respective cell leader, production manager, guide, etc. researchers designed Kanban cards. The type of Kanban system which was going to implement there, was Double Kanban system. In that, the Withdrawal Kan-ban card was denoted by yellow sheet while the Production Kanban card was denoted by green sheet. Two different colors were used to avoid the confusion of users of the cards. The contents which are shown in Kanban card was according to need and requirement of a cell leader, oper-ators and casuals.

Followings are the meaning of terms used in Kanban card.

1. Production Kanban card: This card should be at output side of process. (Items ready for Dispatch)
2. Withdrawal Kanban card: This card should be at input side of process. (Items to be received for Processing)

3. Item Description and part number denotes the information about type of component which is to be kept in that particular trolley. e. g. Piston 8O43
4. One trolley should contain one card.
5. Subsequent process should pull material from preceding process with exchange of cards. e. g. Hardening process should pull trolley of piston from piston carburizing cell.
6. Trolley Capacity: This is the optimum number of quantity of component which should be kept in one particular trolley, to which that card is attached. Trolley should not contain less than or more than that particular trolley capacity. e. g. For 8O43 Piston, Trolley Capacity = 48
7. Location From: This is the location from where information is sent.
8. Location To: This is the location at which information is collected. e. g. Information (Kan-ban card) is sent from Heat Treatment Plant (Hardening) and is collected at Piston Carbu-rized Cell.
9. Issue Number: This is denoted by 'a/b'. Where 'a' is the number of that particular card and 'b' is the total number of cards. e. g. 1/3

The formula for calculating number of Kanban is as bellow:

$$K = DL (1+S) / C$$

Where, K = Number of Kanban

D = Demand per hour

L = Lead Time or Replenishment Time of Kanban in hours S = Safety Requirement (10%)

C = Size of Container or Kanban (According to Thumb Rule, it is nearly 10% of Daily Demand)

As it has mentioned that according to Thumb Rule, the size of container is nearly 10% of daily demand, but by considering the material carrying cost and the holding cost, it was not possible to take it as 10% of daily demand so we took it as an optimum balancing figure. The size of container we had considered was depending on the size and weight of parts which had to trans-fer as well as the distance between two cells where the parts had to transfer. As hardening and carburizing operations were at heat treatment plant, also some cells related to power steering product were at plant-2 while some were at plant-3, so taking size of container as only 10% of daily demand for long distance movement of parts was quite uneconomical. Hence, after

considering all these things, we found the final container sizes for each type of parts of power steering like, piston, sector shaft, worm, nut, etc.

As a sample example, the calculation of number of Kanban as well as inventory, according to formula given above, for 8O43 hard piston cell is shown bellow. e. g. Lead time for 8O43 hard piston = 3.55 hours

Demand per hour = 10

Size of container = 48

Safety requirement = 10%

Number of Kanban = [10 * 3.55 * (1 + 0.1)] / 48

= 0.79 / hour

= 0.79 * 16 / day

= 12.60 ~ 13 / day

Also, total inventory per day = 13 * 48

= 624 / day

Though, there were some variances in between practically implemented and theoretically calculated values of inventory, they had kept practically implemented value of inventory as it is for most of the parts. That was, because to satisfy or to give response to customer's sudden require-ment. So, that excess inventory was coming under the opportunity cost. While they had also done some slight changes in practically implemented inventory value for some parts, according to their theoretically calculated value.

To Implement Kanban Card to Convert Present Push System of Material Movement into Pull System

After designing of Kanban card, the actual working or use of that card was started. Dual Kanban system was implemented for 8O43 piston cell. In this system two types of card were used, first one is Production Kanban card and second one is Withdrawal Kanban card. Production Kanban card should be use at the output side, while Withdrawal Kanban card should be use at the input side of cell. As there was a cellular manufacturing used for the production in the company, the pistons were also produced through different cells.

The production of 8O43 piston was through following stages.

1. Raw materials for 8O43 piston were supplied from store to soft piston cell.
2. After processing at soft piston cell, the outputs of that cell were supplied to heat treatment

plant for carburizing operation. The cycle time for carburizing operation was 36 hours.

3. In this stage, carburized materials or parts were supplied to piston carburized cell for further processing.
4. After getting processed, they were supplied to again heat treatment plant for hardening operation. The cycle time for hardening operation was 12 hours.
5. This is the stage of production of finished 8O43 piston, where hardened materials or parts from heat treatment plant were supplied to piston hard cell for some final processing.
6. At this stage, the finished 8O43 hard pistons were supplied to washing and after getting washed, they were ready for final assembly operation.
7. After assembling of different parts at assembly section, the final power steering products were supplied to dispatch area, where products were ready for dispatching.

These all are the key stages which should be considered while implementation of Kanban system. As Kanban system is based on a Pull technology, researchers started implementing it from dispatch to assembly, assembly to hard piston cell, hard piston cell to heat treatment plant (hardening), heat treatment plant to piston carburized cell, piston carburized cell to again heat treatment plant (carburizing), heat treatment plant to soft piston cell & from soft piston cell to store at the end.

First researchers found the total number of models of power steering which were stored at dispatch for final delivery to the customers and collected information about the inventory or stocks they were maintaining for each of the total models. After discussing with the guide and supervisor of dispatch area, researchers divide total stocks into optimum batch size or lot size. This was the size which should be considered as trolley capacity in Kanban card. The inventory or stocks of a final product which they were maintaining at dispatch area was based on their practical experiences and monthly predicted demand of products from customers. It was not based on any theoretical formula of calculating number of Kanban which researchers have already mentioned above.

Following table gives information about types of power steering model, total stocks of respective model, trolley capacity and number of Kanban cards for each model.

Model Name	Total Stock Quantity	Trolley Capacity	Number of Kanban cards
8O43-302	700	100	7
8O43-303	160	40	4
8O43-806	300	60	5
8O43-169	300	60	5
8O43-294	100	25	4
8O43-215	100	25	4
8O43-810	50	25	2
8O43-820	30	15	2
8O43-821	30	15	2
8O43-805	30	15	2
8O43-804	30	15	2
8O43-826	200	50	4
8O43-244	50	25	2

Note : The figures of Total Stock Quantity which have given in the table was based on the monthly predicted demand plan in the month of July.

The figures of stock quantity, trolley capacity and number of Kanban which have mentioned above are totally flexible and it will be adjusted according to the customer demands.

After deciding optimum trolley capacity and number of Kanban for each of the model of power steering, researcher handed over the calculated number of Kanban cards to supervisor of dispatch area and also explained the whole procedure to him about the functioning of this system. As per the functioning of Pull technology, dispatch area (succeeding process) had to pull material from assembly area (preceding process), so researcher also explained the each and every terms and functioning of Kanban system to assembly in-charge, supervisor and operators.

The inventory they were keeping for each cell was as follows:

- For Hard Piston Cell,

  8O43 RH = 144 & 8O43 LH = 96

- For Piston Carburized Cell,

  8O43 RH = 144 & 8O43LH = 96

- For Soft Piston Cell,

  8O43 = 144

- For Hardening Cell of Heat Treatment

  Plant, 8O43 RH = 288 & 8O43 LH = 192

- For Carburizing Cell of Heat Treatment

  Plant, 8O43 = 288

With the help of quantity of inventories which have been mentioned above & capacity of trolley, I calculated the numbers of Kanban for each respective cell and for each sub-types of 8O43 piston were calculated. These are given bellow:

- For Hard Piston Cell,

  8O43 RH = 3 & 8O43 LH = 2

- For Piston Carburized Cell,

  8O43 RH = 3 & 8O43LH = 2

- For Soft Piston Cell,

  8O43 = 3

- For Hardening Cell of Heat Treatment

  Plant, 8O43 RH = 6 & 8O43 LH = 4

- For Carburizing Cell of Heat Treatment

  Plant, 8O43 = 6

Note: The mentioned data of number of Kanban cards and stock of inventory was according to the monthly predicted demand in the month of July.

After implementing the Kanban system from dispatch to assembly and from assembly to machining centre according to the Pull technology, it was implemented to store. In that, raw materials or parts were pulled by the soft piston cell from store. Here also, the functioning of

the system was explained to each and every concerned person. While implementing Kanban system from soft piston cell to store, withdrawal card was kept at the input side of cell, which was giving withdrawing signal to store. For that optimum number of Kanban cards and trolley capacity was decided by discussing with guide and concerned persons which was 2 and 40 respectively.

Dispatch	Kanban card (for different models)
↓	
Assembly	Withdrawal Kanban (Trolley C. = 48)
↓	
Hard Piston Cell (output)	Production Kanban (Trolley C. =48)
↓	
Hard Piston Cell (input)	Withdrawal Kanban (Trolley C. = 48)
↓	
Hardening (output)	Production Kanban (Trolley C. =48)
↓	
Hardening (input)	Withdrawal Kanban (Trolley C. = 48)
↓	
Carburized Piston Cell (output)	Production Kanban (Trolley C. =48)
↓	
Carburized Piston Cell (input)	Withdrawal Kanban (Trolley C. = 48)
↓	
Carburizing (output)	Production Kanban (Trolley C. =48)
↓	
Carburizing (input)	Withdrawal Kanban (Trolley C. = 48)
↓	
Soft piston Cell (output)	Production Kanban (Trolley C. =48)
Soft Piston Cell (input)	Withdrawal Kanban (Trolley C. = 40)
↓	
Store (Raw material)	

FINDINGS

There was a difference in practically implemented and theoretically calculated inventory value of different parts of power steering. They have kept practically implemented value of inventory

as it is for most of the parts of power steering as an opportunity cost to satisfy customer's sudden demands.

They have made few changes in inventory value of some parts of power steering according to the theoretically calculated value of the inventory.

RECOMMENDATIONS

1. A more detail study should be done to avoid excess of inventory in order to reduce opportunity cost.
2. As implementation has been done for the piston cell, it can be implemented to other cells as well as for the other products.
3. Implementation of basic Kanban card has been done but in future, Barcode Kanban card system can be implemented to control system centrally.

LIMITATIONS OF THE STUDY

1. Since this is a special activity, there was some restriction to share information.
2. Calculation of daily demand for different components on every production line is a time consuming process.
3. In some cases concern person did not give desired information at the required time and also some were showing resistance to change. It means, they were opposing to the implementation of new system.
4. Kanban system includes the manual intervention & hence it is not possible to eliminate the errors 100%.

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THE PROCESS MODEL FOR SHOP FLOOR MANAGEMENT IMPLEMENTATION MEASURING PROCESS EFFECTIVENESS USING CPM/PERT IN A TEXTILE INDUSTRY

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ABSTRACT

Growing effects of the globalization in various business environments affects the textile manufacturing industry in terms of effective and yet efficient overall performance. Therefore in planning, scheduling and controlling a production activities, project management techniques (PERT and CPM) are used.

Researchers have shown here some simple Operations Research methods those can be used to achieve better performance. The methods of CPM and PERT were used to analyze a production process.

The objective of the paper is to eradicate wasteful space and thereby fixed costs associated with them. Further, secondary objectives are to form a more effective and logical layout with a better flow of materials, more robust manufacture by repositioning of functions and machinery, and an increased focus on value added activities.

This paper defines the scope of shop floor management, to sketch a basic structure in terms of an overall process reference model as well as to feature new and modified layout to improve its execution. At the end of the research, the result is expected to help to understand more the concept of CPM and PERT methods in reducing the project completion time.

Keywords: CPM, PERT, Textile Industry, Material Flow, Layout, Process Cycle Time

INTRODUCTION

The Program (or Project) Evaluation and Review Technique (PERT), is a statistical tool, commonly used in project management. PERT is designed to analyze and represent the tasks involved in completing a given project. First developed by the United States Navy in the 1950s, it is commonly used in conjunction with the critical path method (CPM).

PERT is a method to analyze the involved tasks in completing a given project, especially the time needed to complete each task, and to identify the minimum time needed to complete the total project. During project execution, however, a real-life project will never execute exactly as it was planned due to uncertainty. It can be ambiguity resulting from subjective estimates that are prone to human errors or it can be variability arising from unexpected events or risks. The main reason that PERT may provide inaccurate information about the project completion time is due to this schedule uncertainty. This inaccuracy is large enough to render such estimates as not helpful.

Critical path method (CPM) is an algorithm for scheduling a set of project activities. It is an important tool for effective project management. The critical path method (CPM) is a project modeling technique developed in the late 1950s by Morgan R. Walker of DuPont and James E. Kelley, Jr. of Remington Rand.

CPM is commonly used with all forms of projects, including construction, aerospace and defense, software development, research projects, product development, engineering, and plant maintenance, among others. Any project with interdependent activities can apply this method of mathematical analysis. Although the original CPM program and approach is no longer used, the term is generally applied to any approach used to analyze a project network logic diagram.

The essential technique for using CPM is to construct a model of the project that includes the following:

- A list of all activities required to complete the project
- The time (duration) that each activity will take to complete

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- The dependencies between the activities
- Logical end points such as milestones or deliverable items

Using these values, CPM calculates the longest path of planned activities to logical end points or to the end of the project, and the earliest and latest that each activity can start and finish without making the project longer. This process determines which activities are "critical" (i.e., on the longest path) and which have "total float" (i.e., can be delayed without making the project longer). In project management, a critical path is the sequence of project network activities which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date. A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path.

CPM analysis tools allow a user to select a logical end point in a project and quickly identify its longest series of dependent activities (its longest path). These tools can display the critical path (and near critical path activities if desired) as a cascading waterfall that flows from the project's start (or current status date) to the selected logical end point.

In manufacturing engineering, process layout is a design for the floor plan of a plant which aims to improve efficiency by arranging equipment according to its function. The production line should ideally be designed to eliminate waste in material flows, inventory handling and management. In process layout, the work stations and machinery are not arranged according to a particular production sequence. Instead, there is an assembly of similar operations or similar machinery in each department (for example, a drill department, a paint department, etc.)

OBJECTIVES OF THE STUDY

1) To determine the activities involved in the manufacturing process.
2) To analyze the effect on the shop floor layout.
3) To analyze the influence of CPM and PERT in the textile industry.

DATA & DATA ANALYSIS

Researchers have analyzed the shop floor layout and made significant changes in layout. The details of the textile manufacturing sections with sub departments and number of machines are as follows.

Textile Section Details are as follows

1) Laser section (total 3)
   - Laser machine 1to Laser machine 3
2) Straightening section
   - Straightening machine 1(capacity up to Thickness=10 mm, Length=3000mm, Width=1500 mm)
   - Straightening Machine 2 (Capacity up to Thickness=10 mm, Length=1500mm, Width=1000 mm)
   - Straightening Machine 3 (Capacity up to Thickness=3 mm, Length=1000mm, Width=500 mm)
3) Bending Section
   - Bending machine 1(320 Ton)
   - Bending machine 2(320 Ton)
   - Bending machine 3(150 Ton)
   - Bending machine 4(150 Ton)
   - Bending machine 5(180 Ton)
4) Punching Section
5) Tapping Section (total 2)
   - Tapping machine 1& Tapping machine 2

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6) Spot Welding (total 3)
   - Spot welding 1 to Spot welding 3
7) MIG/MAG Welding (total 12)
   - Welding station No-01 to Welding station No-12

BEFORE

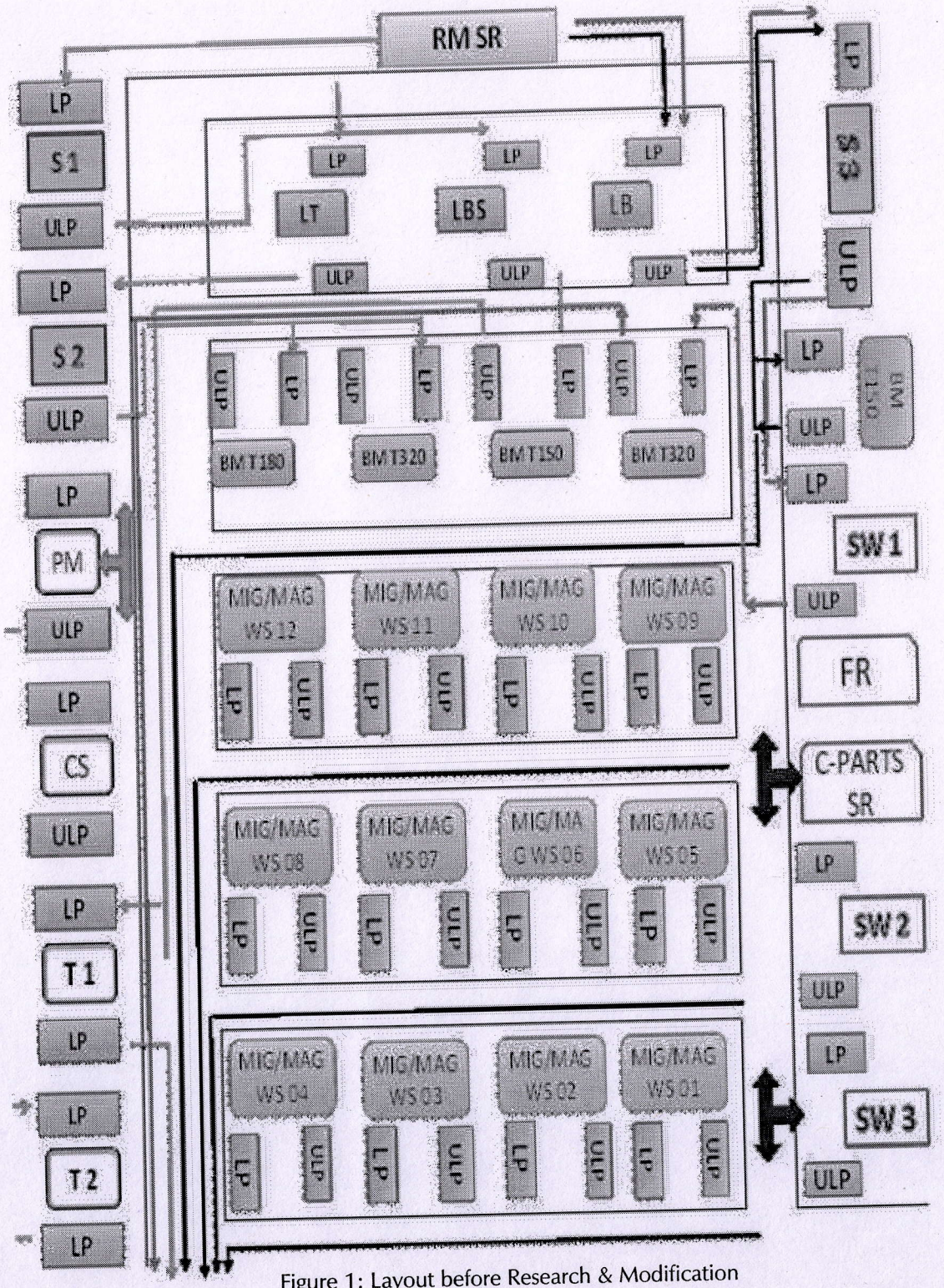


Figure 1: Layout before Research & Modification

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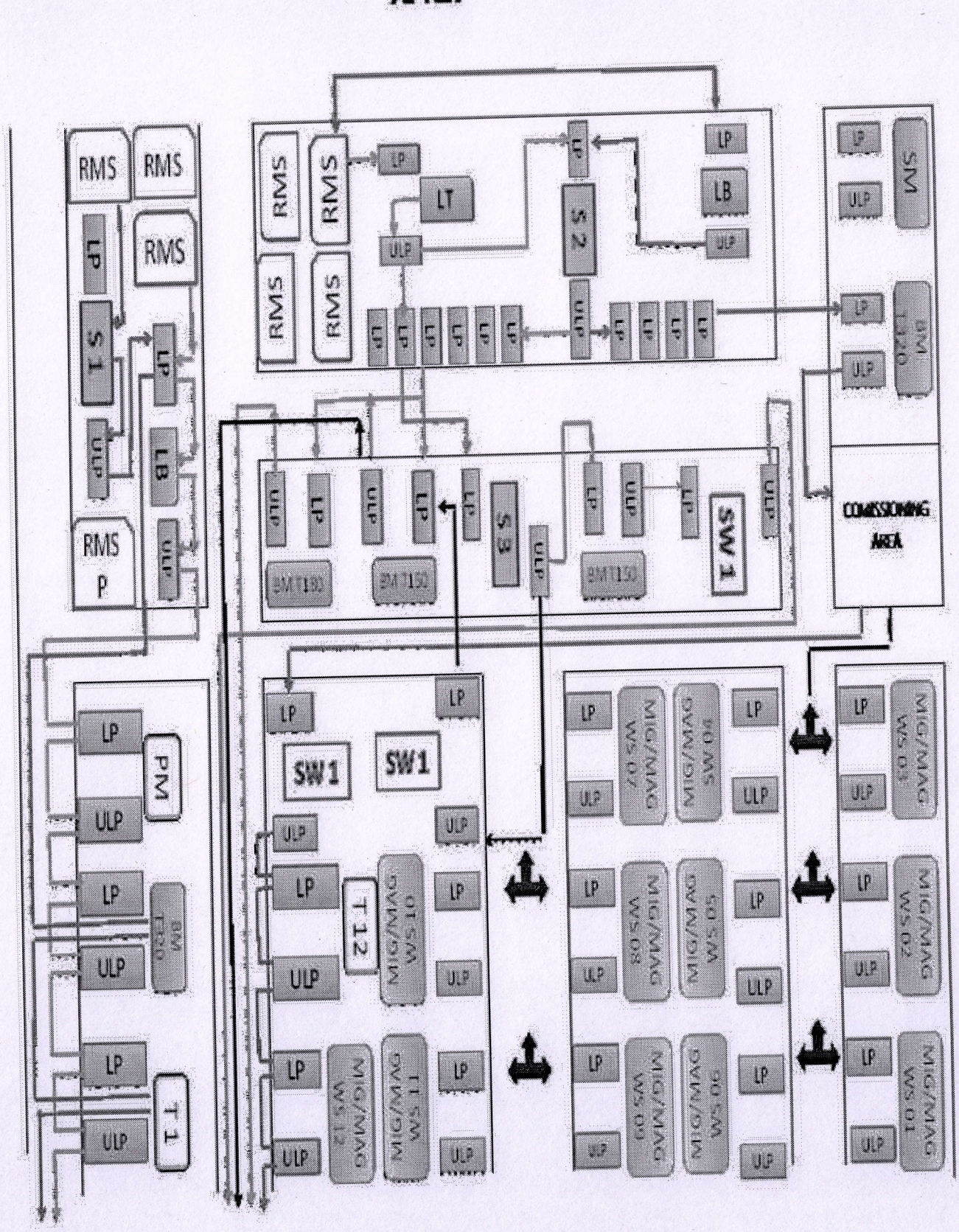


Figure 2: Layout after Research & Modification

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Abbreviations used in layouts are as follows

SN	Abbreviations	Meaning	SN	Abbreviations	Meaning
1	S	Straightening	10	LT	Laser Trump
2	LP	Loading Pallet	11	LBS	Laser By-Stronic
3	ULP	Un- Loading Pallet	12	LB	Laser Bystar
4	BM	Bending Machine	13	CS	Crimping Section
5	SW	Spot Welding	14	RMS	Raw Mat Storage
6	WS	Welding Stations	15	SM	Shearing Machine
7	T	Tapping	16	P	Purchasing
8	PM	Punching Machine	17	RMSR	Raw Material Storage Racks
9	C PARTS SR	C Part Storage Rack	18	FR	Fasteners Rack

Material flow in department is as follows

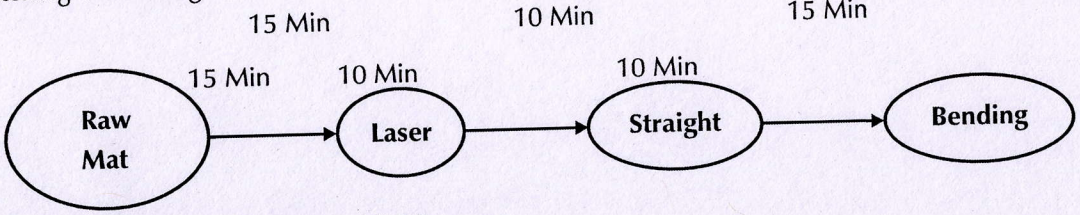
Material Flow Description	Percentage
Laser + Straightening + Bending + Powder coating	10%
Laser + Straightening + Bending + Tapping + Welding + Powder coating	10%
Laser + Straightening + Bending + Welding + Powder coating	25%
Laser + Straightening + Powder coating	05%
Straightening + Laser + Bending + Tapping + Powder coating	25%
Laser + straightening + Punching + Bending + Tapping + Powder coating	25%
Total	**100%**

Critical Path Method (CPM)

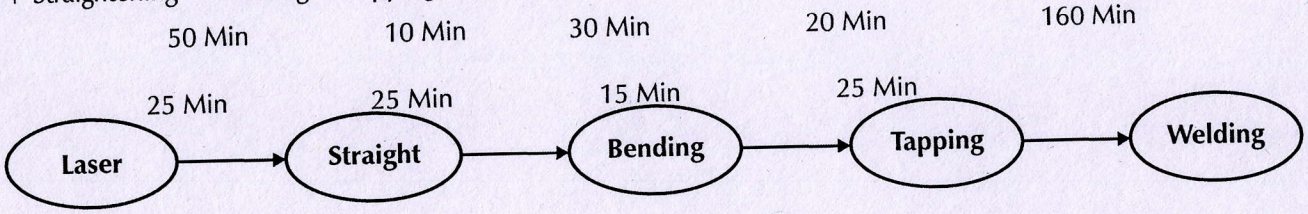
Researchers have studied and analyzed the various process paths and the time required to process using CPM. After analyzing, time required before and after research, the significant time reduction in total process time is the output of the research.

BEFORE (before research)

Laser + Straightening + Bending

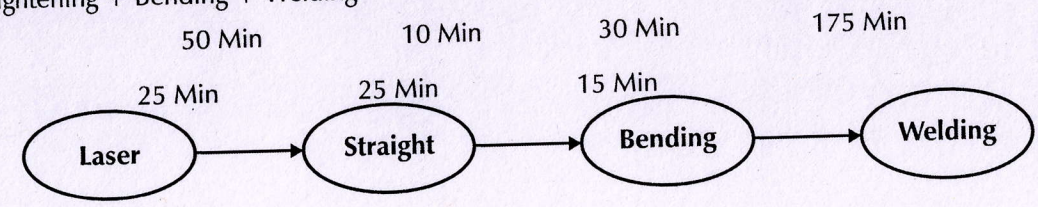


Laser+ Straightening + Bending + Tapping + Welding

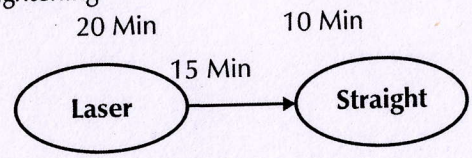


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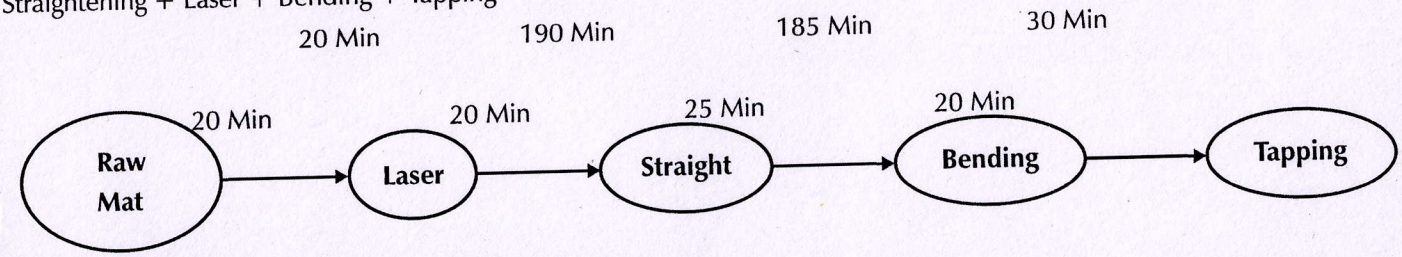
Laser+ Straightening + Bending + Welding



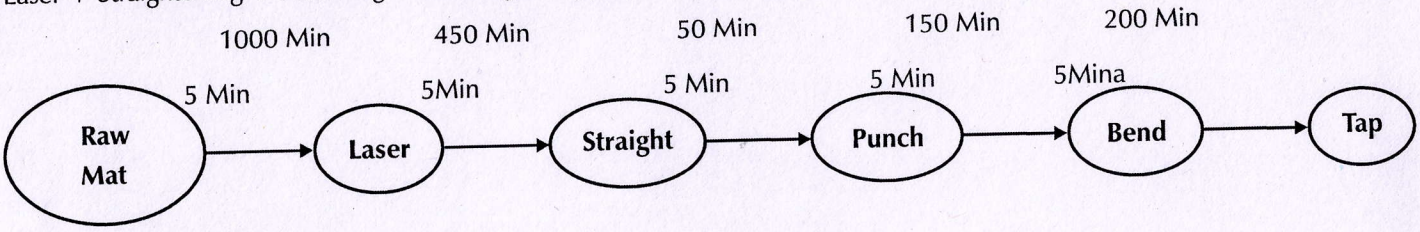
Laser + Straightening



Straightening + Laser + Bending + Tapping

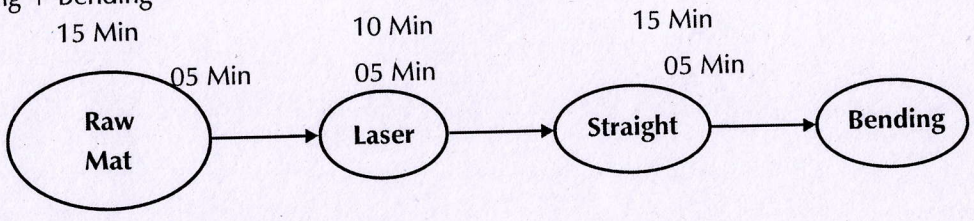


Laser + Straightening + Punching + Bending + Tapping

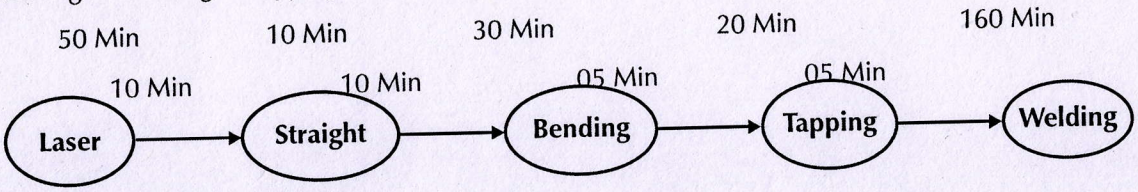


AFTER (After research)

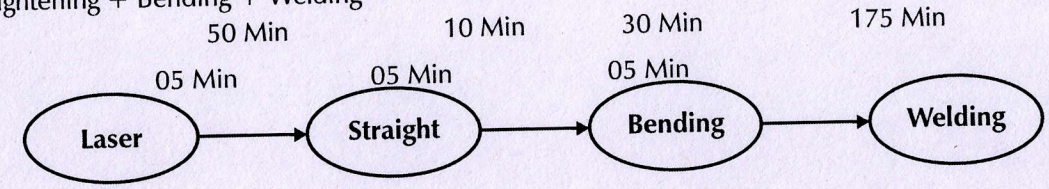
Laser + Straightening + Bending



Laser+ Straightening + Bending + Tapping + Welding

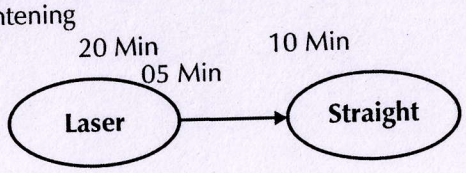


Laser+ Straightening + Bending + Welding

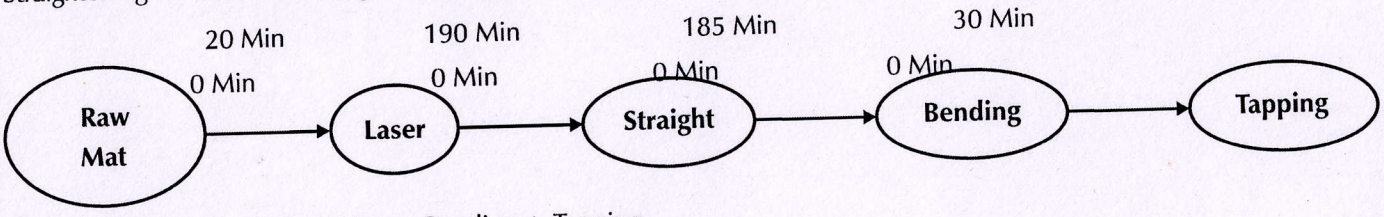


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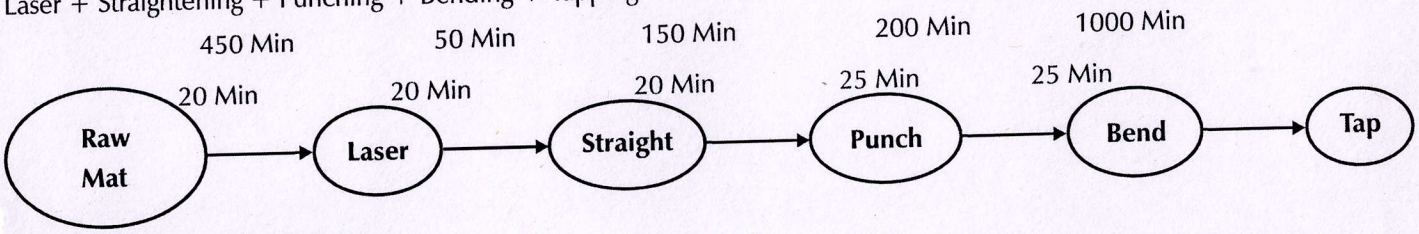
Laser + Straightening



Straightening + Laser + Bending + Tapping



Laser + Straightening + Punching + Bending + Tapping



Process Time Calculations

Before (Before Research)

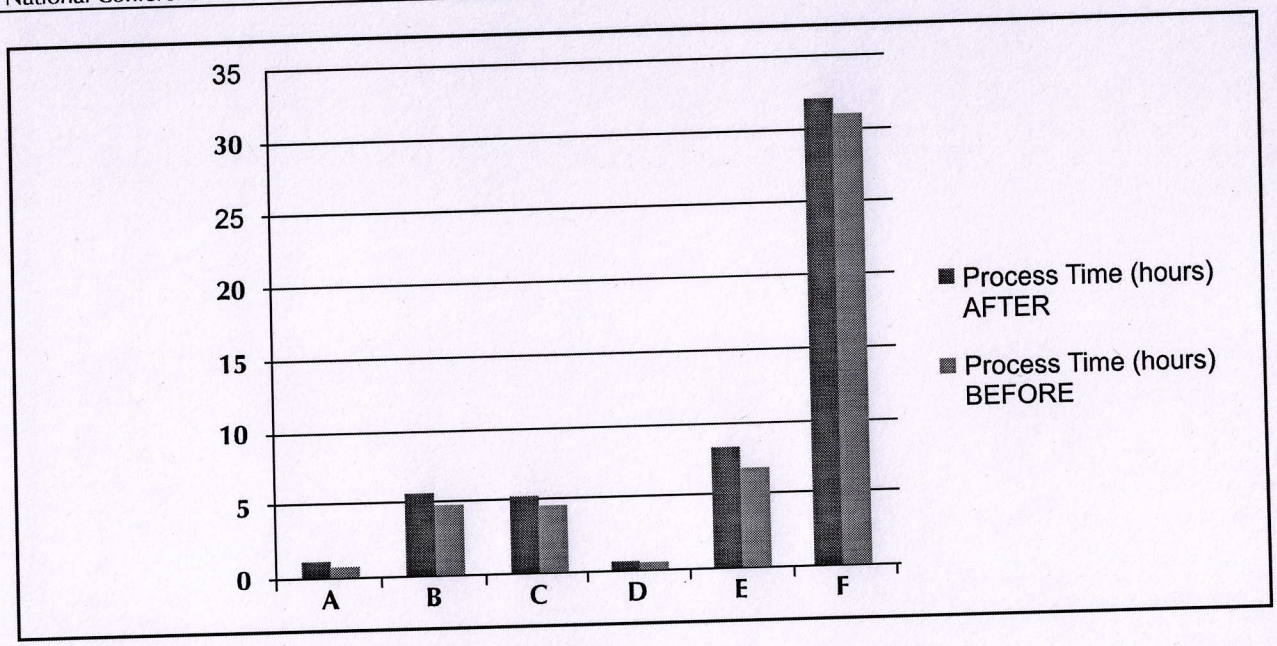
	Material Flow Description	Percentage	Process Time
A	Laser + Straightening + Bending + Powder coating	10%	1.25 Hrs
B	Laser + Straightening + Bending + Tapping + Welding + Powder coating	10%	06 Hrs
C	Laser + Straightening + Bending + Welding + Powder coating	25%	5.5 Hrs
D	Laser + Straightening + Powder coating	05%	0.75 Hrs
E	Straightening + Laser + Bending + Tapping + Powder coating	25%	8.5 Hrs
F	Laser + straightening + Punching + Bending + Tapping + Powder coating	25%	32.7 Hrs
	Total Time		**54.7 hours**

Process Time calculations

After (After Research)

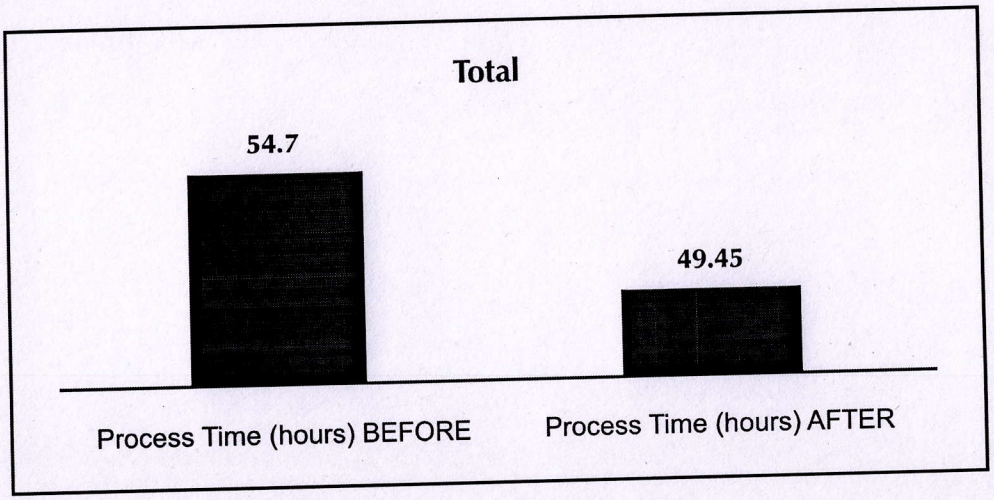
	Material flow description	Percentage	Process Time
A	Laser + Straightening + Bending	10%	0.9 hours
B	Laser+ Straightening + Bending + Tapping + Welding	10%	5 hours
C	Laser+ Straightening + Bending + Welding	25%	4.7 hours
D	Laser + Straightening	05%	0.6 hours
E	Straightening + Laser + Bending + Tapping	25%	7.0 hours
F	Laser + Straightening + Punching + Bending + Tapping	25%	31.25 hours
	Total Time		**49.45 hours**

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Graph 1: Comparison of Total Process Time (Before & After).

CONCLUSION



By discussing related scientific research, the formal definition for shop floor layout shop floor layout. The process model is designed to prevent abnormalities, to ensure highly reactive decision making and to facilitate continuous efficiency improvement have been described more in detail. It is important to understand this approach as a consistent guideline rather than a catalogue of tools to be implemented. The main benefit achieved due to efficient shop floor management is total process time required id improved by 9.60%. Also Dedicated cell management for different sub departments is achieved.

FUTURE SCOPE FOR RESEARCH

1. To study effect on Productivity.
2. To study internal logistics process and flow.

LIMITATIONS OF THE STUDY

1. Since this is a special activity, there was some restriction to share information.
2. Before trying any method or technique proper knowledge is required otherwise wastage of raw material & other resources becomes greater cause of concern.

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CORPORATE SOCIAL RESPONSIBILITY MANAGEMENT: A TOOL TO ENHANCE SOCIO- ECONOMIC PARAMETERS, WITH SPECIAL REFERENCE TO PCMC

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ABSTRACT

Many factors account for the socioeconomic development of the region such as per capita income, education & literacy, population, health & sanitation, infrastructure & facilities etc. Besides the role of local, state and central government, many corporate companies / Industries/ Organizations started realizing that they would have to rise over and above the profitability and take care of all those associated with their survival in the society directly or indirectly. "No success or achievement in material terms is worthwhile unless it serves the needs or interests of the country & its people and is achieved by fair and honest means. - JRD Tata This realization resulted into the concept of Corporate Social Responsibility (CSR). This research paper made an attempt to shape out contributions of many corporate in socioeconomic development of a PCMC region, Maharashtra. Emphasis has been given to its contribution in the Education, Employment, and Health sector specially. Research to be done on primary & secondary data collected from sources.

Keywords: CSR, Socioeconomic, Education, Employment, Development.

INTRODUCTION:

The importance of CSR emerged significantly in the last decade. Over the time, CSR expanded to include both economic and social interests. Along with this it also broadened to cover economic as well as social interests. However, the efforts of Governments may not be adequate to provide basic services to its citizens. It is being increasingly recognized that progress and welfare of a society is not only the responsibility of the Government alone, but many more stakeholders need to be involved to attain the development goal. Generally, CSR is understood as "the commitment of business to contribute to sustainable economic development by working with employers, their families, the local community and society at large to improve their quality of life, in ways that are both good for business and good for development. A widely quoted definition by the World Business Council for Sustainable Development state that "Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" (WBCSD, 1999). Thus, the meaning of CSR has two fold. On one hand, it exhibits the ethical behavior that an organization exhibits towards its internal and external stakeholders. On the other hand, it denotes the responsibility of an organization towards the social, economic & environment society in which it operates. CSR is regarded as vehicle through which companies give something back to the society. It involves providing innovative solutions to societal and environmental challenges. But the challenge for development professional and business community is to identify CSR priorities and the areas of interventions which are meaningful in the context of PCMC development. One of the most renowned organizations situated in PCMC- TATA Motors "Jamshedji Tata has very beautifully defined the Corporate Social Responsibility "The clear definition of Corporate Social Responsibility is that the community is not just another stakeholder in our business but the very purpose of our existence." TATA MOTORS played important role in development of PCMC with contribution of CSR for society.

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PCMC HISTORY, GROWTH & DEVELOPMENT:

On 4th March 1970 late Annasaheb Magar established Pimpri Chinchwad Municipal Council by merging four villages namely Pimpri, Chinchwad, Akurdi and Bhosari. Due to increase in population and local demands of the citizens, he started the Pimpri Chinchwad Transport Service for the benefit of people of the city in the year 1974. He was elected as the "First Chairman" of the Pimpri Chinchwad Municipal Council. In 1975 the status of council was changed from C class to A class. Pimpri-Chinchwad Municipal Corporation or PCMC is a Municipal Corporation in the city of Pimpri-Chinchwad which is an Urban Agglomeration (UA) of Pune. Pimpri Chinchwad Municipal Corporation is situated on the old Mumbai–Pune Expressway in the heart of Pimpri-Chinchwad which is one and a half hours from Navi Mumbai. Pimpri Chinchwad Council was formed covering area of about 87 km2 which later on was established as Municipal Corporation in 1982, which now covers an area of about 181 square kilometers. As per 2011 census population of Pimpri Chinchwad is 17, 29,000 souls growing at a rate of 6% annually, with a national average of 2.1%. The industrial area of PCMC was started with the established of Hindustan Antibiotic the first pharmaceutical company in the year 1954. In the beginning four villages of Pimpri, Chinchwad, Akurdi and Bhosari were merged into this corporation area. But today PCMC covers 37 suburbs/ Villages including Nasik Phata, Kasarwadi, Nigdi, Nigdi Pradhikaran, Akurdi, Tathawade, Bhosari, Talegaon Dabhade Talwade, Hinjewadi, Sambhajinagar, Ajmera Colony, - Masulkar colony, Sangvi, Pimple Nilakh\Aund, Camp, Wakad, Sant Tukaram Nagar, Nehrunagar Pimple Gurav, Kalewadi, Thergaon, Chikhali, Rahatani, Pimple Saudagar, Punawale, MOSHI,Ravet,DAPODI, Pradhikaran, Shahunagar, CHAKAN Indryaninagar, Rupeenagar.

INDUSTRIAL DEVELOPMENT IN PCMC:

Pimpri Chinchwad is also known as "Audyogik Nagar" (Industrial City). PCMC today is one of the major industrial hubs in Asia. PCMC is now home to the Indian operations of major automobile companies like Premier Limited, Mahindra Navistar, Bajaj Auto, BEL Optronic Devices Limited, TATA Motors (formerly TELCO), Kinetic Engineering, Force Motors (formerly Bajaj Tempo) DaimlerChrysler, Thermax and Auto line Industries. In addition to this, several heavy industries such as Forbes-Marshall, Thyssen Krupp and GEA Ecoflex Alfa Laval & Sandvik. Asia has their manufacturing units in the town and also the German company KSB Pumps, Swedish bearing company SKF. Rajiv Gandhi InfoTech Park hosts several Software and Information Technology majors like Cognizant, Accenture, IBM India, KPIT Cummins, Tata Technologies, Infosys, Wipro, Geometric Limited, Finolex cables limited, SQS India Info systems Pvt. Ltd., BNY Mellon (India), among others. Now Mercedes Benz also included in it.

This is the Richest Municipal Corporation - not only in India but the Richest in Asia. And the reason behind it is that, it has a industrial belt of small as well as big National & Multinational Companies. All the industrial units are closed on Thursdays. Because of efficient and good planning though it is industrial area the environment is quite pleasant with so many trees around it. One can never think of pollution. With the help of Municipal Corporation in urban parts, many different Parks are developed. Appu Ghar of Nigadi, Moria Gosavi of Chinchwad, Vaishnav Devi temple of Pimpri which is carbon copy if Vaishanav Devi temple of Jammu & Kashmir, and Sarpodyan of Akurd, Science Park in Chinchwad, are some of the very famous spots which one would like to see.

Present population approx	10,00,000	Area	176 sq.km
a1 number of Corporation Employees	10,252	Total length of Roads	595 Km.
Number of Industries	6195	Major bridges	11
Number of dispensaries	15	Number of private schools	119
Number of hospitals	5	Number of Municipal schools	128
Public gardens	75	Total strength of students	1,56,000

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Description	1991 - 92	1992 - 93	1993 - 94	1994 - 95	1995 - 96	1996 - 97
Bus Routes	57	58	58	63	55	55
Total number of Buses	276	249	249	248	220	220
Total number of Employees	2100	2112	2056	2089	2147	2138
Daily Commuters	145067	124136	120683	131446	133999	128041

Source: http://www.punediary.com/html/pcmt.html

LITERATURE REVIEW:

CSR Concept, Meaning, Definitions & Models:

The concept of CSR originated in the 1950's in the USA but it became prevalent in early 1970s. During the 1980's to 2000, corporations recognized and started accepting a responsibility towards society. Corporate social responsibility (CSR) focuses on the wealth creation for the optimal benefit of all stakeholders – including shareholders, employees, customers, environment and society. The term stakeholder means all those on whom an organization's performance and activities have some impact either directly or indirectly. This term was used to describe corporate owners beyond shareholders as a result of a book titled Strategic management: a stakeholder approach by R. Edward Freeman in the year 1984.

World Business Council for Sustainable Development defines Corporate Social Responsibility (CSR) as "The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large."

The European Commission's definition of CSR is: "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis."

According to CSR Asia, "CSR is a company's commitment to operating in an economically, socially and environmentally sustainable manner whilst balancing the interests of diverse stakeholders."

The rationale for CSR has been articulated in a number of ways. In essence it is about building sustainable businesses, which need healthy economies, markets and communities. The key drivers for CSR are:

Enlightened self-interest - creating a synergy of ethics, a cohesive society and a sustainable global economy where markets, labour and communities are able to function well together.

Social investment - contributing to physical infrastructure and social capital is increasingly seen as a necessary part of doing business.

Transparency and trust - business has low ratings of trust in public perception. There is increasing expectation that companies will be more open, more accountable and be prepared to report publicly on their performance in social and environmental arenas

Increased public expectations of business - globally companies are expected to do more than merely provide jobs and contribute to the economy through taxes and employment."

CSR IN INDIA

In India, the ethical model promoted by Mahatma Gandhi during 1930s is well known which stated the role of family-run-businesses conducting social and economic activities. This was followed by the Statist model propounded by Pt. Jawaharlal Nehru. In this model, state-driven policies included state ownership and extensive corporate regulation and administration. In developing economies like India, CSR is seen as part of corporate philanthropy in which corporations augment the social development to support the initiatives of the government. However with time, the scenario of CSR has changed from being philanthropic to being socially responsible to multi stake holders. The period of 1960s and 1970s saw an emergence of CSR

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activities being inbuilt in corporate philanthropy. (Mohan, 2001).

CSR needs to be understood within this context captured in the development oriented CSR framework given below:

Table 1: The four models of Corporate Responsibility (Arora & Puranik 2004)

Model	Focus	Champions
Ethical	Voluntary commitment by companies to public welfare State ownership and legal requirement determine	M.K.Gandhi
Statist	Corporate responsibility Corporate responsibilities limited to private owners	Jawahar Lal Nehru
Liberal	(shareholders) Companies respond to the needs of stakeholders	Milton Friedman
Stakeholder	customers, employees, communities, etc.	R. Edward Freeman

India has been named among the top ten Asian countries paying increasing importance towards corporate social responsibility (CSR) disclosure norms. India was ranked fourth in the list, according to social enterprise CSR Asia's Asian Sustainability Ranking (ASR), released in October 2009. 'Sustainability in Asia ESG reporting uncovered' (September 2010) is based on four parameters viz. General, Environment, Social and Governance. In its study based on 56 companies in India, it observed that India is ranked second in country ranking in Asia and is ranked one ranking in general category. It is observed that reporting is strongly followed by companies as well as they seek international development standards. It could be attributed to the Indian government compelling the public sector companies to provide for community investment and other environmental, social and governance liabilities.

A key finding of the survey conducted in June 2008, aimed at understanding of the role of corporations in CSR, carried out by TNS India (a research organization) and the Times Foundation, revealed that over 90 per cent of all major Indian organizations surveyed were involved in CSR activities. Besides the public sector, it was the private sector companies that played dominant role in CSR activities. A study on the CSR activities of 300 corporate houses, conducted by an industry body in June 2009, revealed that Corporate India has spread its CSR activities across 20 states and Union territories, with Maharashtra gaining the most from them. The study also revealed that about 36 per cent of the CSR activities are concentrated in the state, followed by about 12 per cent in Gujarat, 10 per cent in Delhi and 9 per cent in Tamil Nadu. The companies have on an aggregate, identified 26 different themes for their CSR initiatives. Of these 26 schemes, community welfare tops the list, followed by education, the environment, health, as well as rural development

Another study conducted by Economic Times revealed that donations provided by listed companies grew by 8 per cent during the financial year 2008-2009 and that 760 companies donated US$ 170 million in the same year, up from US$ 156 million in the year-ago period. As many as 108 companies donated over US$ 216,199, up 20 per cent over the previous year.

Historically, CSR has been viewed as developed countries' phenomena. As such a large body of literature on CSR practices has merged in the context of developed countries. However, literature on the theory and practices on CSR in the developing countries remains scant (Belal, 2001). Hardly a few studies have looked at CSR practice in India. Different researches at different points of time and classical Indian literature have emphasized the CSR practice of corporate entities in India. The various dimensions of CSR valued by companies are national wealth, employment, environment and social programme including health and literacy. In a survey of CSR reporting in Asia Chapple and Moon (2005) found that nearly three quarters of large companies in India present themselves as having CSR policies and practices. What is the impact of CSR programs on socio-economic development of PCMC.

OBJECTIVES OF STUDY:

1. To understand the concept of CSR.
2. To study and understand the CSR initiatives being taken by selected public and private Indian companies for development of PCMC.

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3. To examine the corporate' approach to work and their mode of action for implementation for CSR initiatives.
4. To assess the impacts of CSR actions on socio-economic development of PCMC in Pune Maharashtra.

RESEARCH METHODOLOGY:

To study the above objectives, 10 major public and private firms have been selected from PCMC. While selecting companies taken into consideration major contribution done by different Manufacturing, Automobile, Pharmaceutical, IT, KPO & BPO, Retail industries. Exhaustive literature survey regarding the topic and related concepts has been done. Secondary data inclusive of quantitative and qualitative data as well collected from various sources including books, research papers, newspapers, magazines, and websites is used for the purpose of study.

LIMITATIONS

The main limitation of this paper is that this study has only focused on a small sample of PCMC. Secondly, information collected from Secondary Data - print literature, websites of these companies and no primary data were collected directly from the stakeholders through interviews or surveys.

DATA ANALYSIS & INTERPRETATION:

Sr. No	Company Name	Type	Focus Area	Business Linkage	Methodology Adopted	Impact
1	TATA Motors	Automobile	Development of weaker section of society	Indirect	1.Employment Generation 2. Economic Capital 3. Human Capital 4. Ecological Balance 5. Pollution Control 6. Natural Capital	Community Development & Environment
2	Thermax	Automobile	Community Development – Children's education	Indirect	Community based primary education development in PCMC – schools tie up	Children's Development
3	Auto	Bajaj Auto	Development of weaker section o society	Indirect	Trust Undertakes long-fterm projects in PCMC rural development.	Community
4	ICICI	Financial	Empower millions economically & socially challenged	Direct	Volunteer, shop, and give India.	Community Development
5	TCS	IT	Flexible global business practices	Indirect	Globally delivery model: development & high delivery services.	Whole country gets benefited.
6	M-cure	Pharma	m-cure care services		Different Hospitals tie up, donation of time, money & medicines	Community health development
7	Hindustan Antibiotics	Pharma	Specially for society health, welfare development	Direct	Hospitals, dispensaries, free medicines camp, health check up camp etc.	Societal & Environment development
8	Infosys	IT	Support & encourage underprivileged sector	Indirect	Infosys Foundation provide medical facilities to remote rural areas organizing novel pension schemes and aiding orphans and street children and rural education program titled "A library for every school", Human Capital	Successfully implemented projects,
9	Mahindra & Mahindra	Automobile	Sharing wealth & promote education	Indirect	Scholarships, lifeline express, girls education free surgeries	,Community development
10	L & T	Engineering	Enhance & empower employee value & responsibility	Indirect	Eco friendly approach awareness HIV/AIDS,	Community service & ecofriendly approach

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Also LAVASA- Retail, Samrudha Jeevan's food ltd, BNY Melon, Syntel, VIRGO- go green, FINOLEX, JCB, Mercedes BENZ, Renault, BOM, SBI took major initiative for financing children's education, women empowerment, go green etc.

Table-1 No. of Companies taking CSR initiatives

Sr.No	CSR Initiative	% of companies
1	Education	100
2	Employment	75
3	Live lihood	60
4	Health	75
5	Environment	65

OBSERVATIONS & FINDINGS

The study shows that all surveyed companies present themselves as having CSR policies and practices. A substantial number of companies reflect their CSR philosophy or social, environmental and ethical objectives in mission statements, vision documents, organizational policy and plans. However, even though surveyed companies have CSR policies and objectives are philanthropic in nature, contributing in the form of social development, educational development, health protection. The study reveals that companies implement CSR programs with respect to rural development through

1. CSR activities implemented directly by the company through its own (i) CSR division,(ii) Human Resource Department(iii) Local management of manufacturing unit;
2. CSR activities implemented through a foundation;
3. CSR activities implemented through partnership with NGOs ,academic institutions, international agencies;
4. CSR activities implemented through partnership with Government.

The study reveals that Corporate no doubt have made significant contributions towards the sustainable development of PCMC.

CONCLUSION:

The conclusion of this study is that social responsibility is regarded as an important business issue of Indian companies irrespective of size, sector, business goal, location of the company. Because Indian companies are realizing that without socio-economic development of the local communities, there can be no stability and sustainability for doing business so as to compete with the global market. The study shows that all surveyed companies present themselves as having CSR policy and practices. Most of the companies which design and implement CSR initiatives in the vicinity. PCMC is the richest & developed corporation cause of contribution of CSR of companies in government development program.

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THE ROLE OF ENTREPRENEURSHIP DEVELOPMENT PROGRAMMES (EDPS) AND ED TRAINER IN IMPROVING SUSTAINABILITY OF THE SHG OWNED ENTERPRISES THROUGH HANDHOLDING AND MONITORING SUPPORT. 233
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A STUDY OF CROWD FUNDING - INNOVATIVE ALTERNATIVE TO TRADITIONAL INVESTMENTS IN INDIA

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ABSTRACT:

The concept of 'crowd funding' is catching up fast which is really not new in India. However, the concept of 'online crowd funding' is new to the country. It is a substitute available to the businessmen's, entrepreneurs, to raise funds for their business. The purpose of this paper is to analyze the emerging crowd-funding phenomenon, meaning of crowd funding, models of crowd funding and Indian scenario and challenges in India. India may soon bring in the requisite laws to support this in a big way pushing SEBI to set up a regulatory framework. An attempt is made in this paper mentioning that any crowd funding involving sale of securities can be either regulated under SEBI's existing norms for Collective Investment Schemes or Alternative Investment funds.

Keywords: Crowd Funding, Equity Crowd Funding, Grameen Bank, Milaap, Kiva, Micro Finance.

INTRODUCTION:

Every businessman, owner, entrepreneur requires funds or finance at the start of the business, expansion of business as well as to meet the day to day expenses of the business. He has to invest his own money, personal belongings and private property by way capital. He can raise funds or finance for his business by adopting traditional ways i. e. issue of shares, debentures, accepting deposits from the public and also borrowing loans from financial institutions, relatives and friends. However in the era of LPG the owners of small businesses and startups can avail funds and finance through social media. They can expand their business too by way of Crowd funding. Crowd funding, a popular concept started in the US and the UK. It is an emerging way of raising capital, through the use of social networking sites. Now the best option to raise funds you are required to do is create an online profile and give the details of your project and fund-raising goals and share the same with public at large, including your peers, relatives, friends of friends, and so forth. The idea of crowd funding is really not new in India. Temples and mosques, for example, are built overnight using a large number of donations. Massive festivals are put together in a matter of days with donations from thousands of devotees. However, the concept of online crowd funding is new to the country.

It is worth to note here that the term Crowd funding is not new to Indians. India has seen a massive crowd funding success story many years before the term was introduced. The story belongs to Dhirubhai Ambani the founder of the Reliance Industries. Crowd funding has been done by the community people from the Gujarat State as well as from entire India for his small yet growing textile business. In the era of globalization, India with its huge market and human capital has become a popular destination for overseas business and other investments that have identified opportunities. We find that Indian crowd funding has been restricted to micro financing category projects. The new companies act, which mandates all companies to spend 2% of their profits on corporate social responsibility, will also help them crowd funding gain traction.

OBJECTIVES:

The objectives of the study are given below:

1. To know the meaning of Crowd funding, online crowd funding and different models of crowd funding.
2. To understand the history of Crowd funding.
3. To observe Crowd funding scenario in India.
4. To analyze the challenges in India.
5. To observe the key points of JOBS Act.

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RESEARCH METHODOLOGY:

For the purpose of this research paper mainly secondary data has been used. The required data was collected from the websites, various journals and newspaper articles have been reviewed while writing this paper. On the basis of published data in magazines, books and information available through websites, an attempt has been made to know about Crowd funding.

DATA ANALYSIS:

Meaning of Crowd Funding:

In simple word, crowd means general public or people. Crowd funding is a way of raising finance by asking a large number of people for a small amount of money. Traditionally, financing a business, project or venture involved asking a few people for large sums of money. The traditional idea of raising funds is now changed and shifted towards Crowd funding, using the internet to talk to thousands – if not millions – of potential funders. Typically, those seeking funds will set up a profile of their project on a website such as those run by our members. They can then use social media, alongside traditional networks of friends, family and work acquaintances, to raise money. Crowd funding is a method of financing that allows individuals to utilize their personal networks to collect funds for their cause or business.

Crowd funding campaigns can be used to fund non-profit creative projects as well as for-profit businesses. Crowd funding is a vast industry and we find more than 500 crowd funding platforms are in existence. Crowd funding is the process of financing a project with a request by entrepreneurs and receiving small amount of contribution from many parties in exchange for a form of value to those parties. Crowd funding connects investors with small business startups and projects through an online transaction portal that removes barriers to entry.

Online Crowd Funding:

Crowd funding is an emerging and innovative online platform that provides small businesses and startups with opportunities to increase their social media presence, investment base, and funding prospects. Crowd funding, a popular concept started in the US and the UK. It is an emerging way of raising capital, through the use of internet or social networking sites such as Facebook or LinkedIn or Twitter or even some dedicated websites. Now the best option to raise funds you are required to do is create an online profile and give the details of your project and fund-raising goals, objects and share the same with public at large, including your peers, relatives, friends of friends, and so forth. The first online crowd funded project is thought to have occurred in 1997.

Different types of crowd funding: donation, debt and equity.

Model I - Reward/Donation Model:

This is the traditional and most common type of raising funds. Generally people invest simply because they believe in the cause. In Rewards-based crowd funding rewards are offered by way of acknowledgements on an album cover, tickets to an event, regular news updates, free gifts and so on. Returns are considered intangible. It includes setting various levels of rewards. Donors have a social or personal motivation for putting their money in and expect nothing back, except perhaps to feel good about helping the project.

Donation crowd funding is exactly what it sounds like - the campaigns amass donations without being required to provide anything of value in return. This type of campaign serves social causes and charities best. In this model, individuals make a financial contribution to a project without any expectations of financial benefits. Sites like Ketto do this kind of crowd sourcing in India.

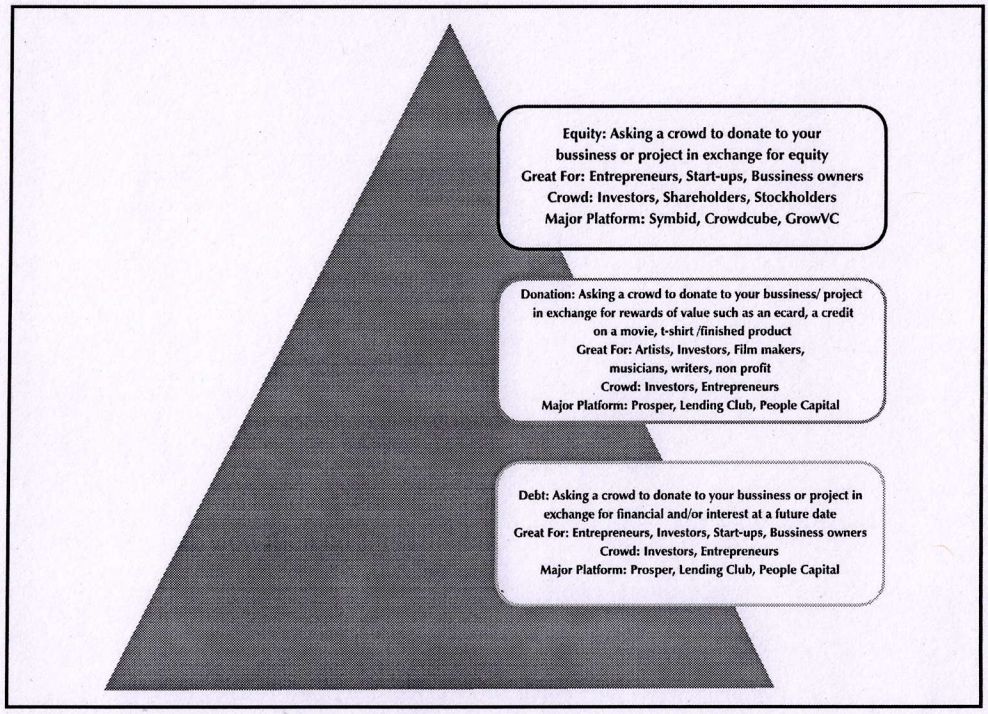
Model II – Debt/ Lending Model:

In this type of model investors lend the money with the intension of earning interest or without interest. In this, the investor will loan money to the project with the expectation of being repaid under the terms and conditions agreed. Investors receive their money back with interest. Lending based crowd funding allows entrepreneurs to raise funds in the form of loans that they will pay back to the lenders over a pre-determined timeline with a set interest rate. Also called peer-to-peer (p2p) lending, it allows for the lending of money while bypassing traditional banks. Returns are financial, but investors also have the benefit of having contributed to the success of an idea they believe in. In the case of microfinance, where very small sums of money are leant to the very poor, most often in developing countries, no interest is paid on the loan and the lender is rewarded by doing social good. Microfinance platform Milaap is an example of such crowd sourcing in India.

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Model III – Equity/ Investment Model:

In this model the investor receives an equity stake in the project. People invest in an opportunity in exchange for equity. Money is exchanged for shares, or a small stake in the business, project or venture. As with other types of shares, apart from community shares, if it is successful the value goes up. If not, the value goes down. Equity crowd funding is on the rise after the signing of the Jumpstart Our Business Startups (JOBS) Act in April of 2012. Equity crowd funding is the exchange of actual shares in a private company for capital. In this form of crowd funding, entrepreneurs can set investor caps, minimum pledge amounts, etc. as well as approve or deny investors who wish to view their business documents.



Crowd Funding History:

Dr. Mohammad Yunus is the pioneer of modern microfinance. In 1976, Yunus launched a research project in Bangladesh to give banking opportunities to low-income people, eliminate the exploitation of the poor and create opportunities for self-employment. After this successful loan, Yunus was able to secure a loan from the government to lend small amounts to the poor. Due to success it was transformed into Grameen Bank. The bank now has more than 8 million borrowers, with 97% of the money going to women-operated businesses. Yunus and Grameen Bank were awarded the Nobel Peace Prize in 2006 for their efforts in economic and social development.

In 2005, Kiva.org became the first micro lending website. It gave individuals the ability to lend small amounts of money to entrepreneurs in poor, rural areas across the globe. The lenders are given pictures and a profile for each loan. Kiva has field partners in various world regions that help document the stories and distribute the loans to each individual. This unique documentation of business owners gives a lender the ability to identify with the borrower and communicates a sense of personalization that his money is going toward something impactful.

In 2006, Prosper.com launched the first peer-to-peer (p2p) lending site in the U.S. The concept was based on Yunus's microfinance vision and Kiva's micro lending model. On the website, individuals submit requests for funding, which include a story, a picture and their credit risk. You might find people, who are trying to refinance debt, fund a vacation or start a business.

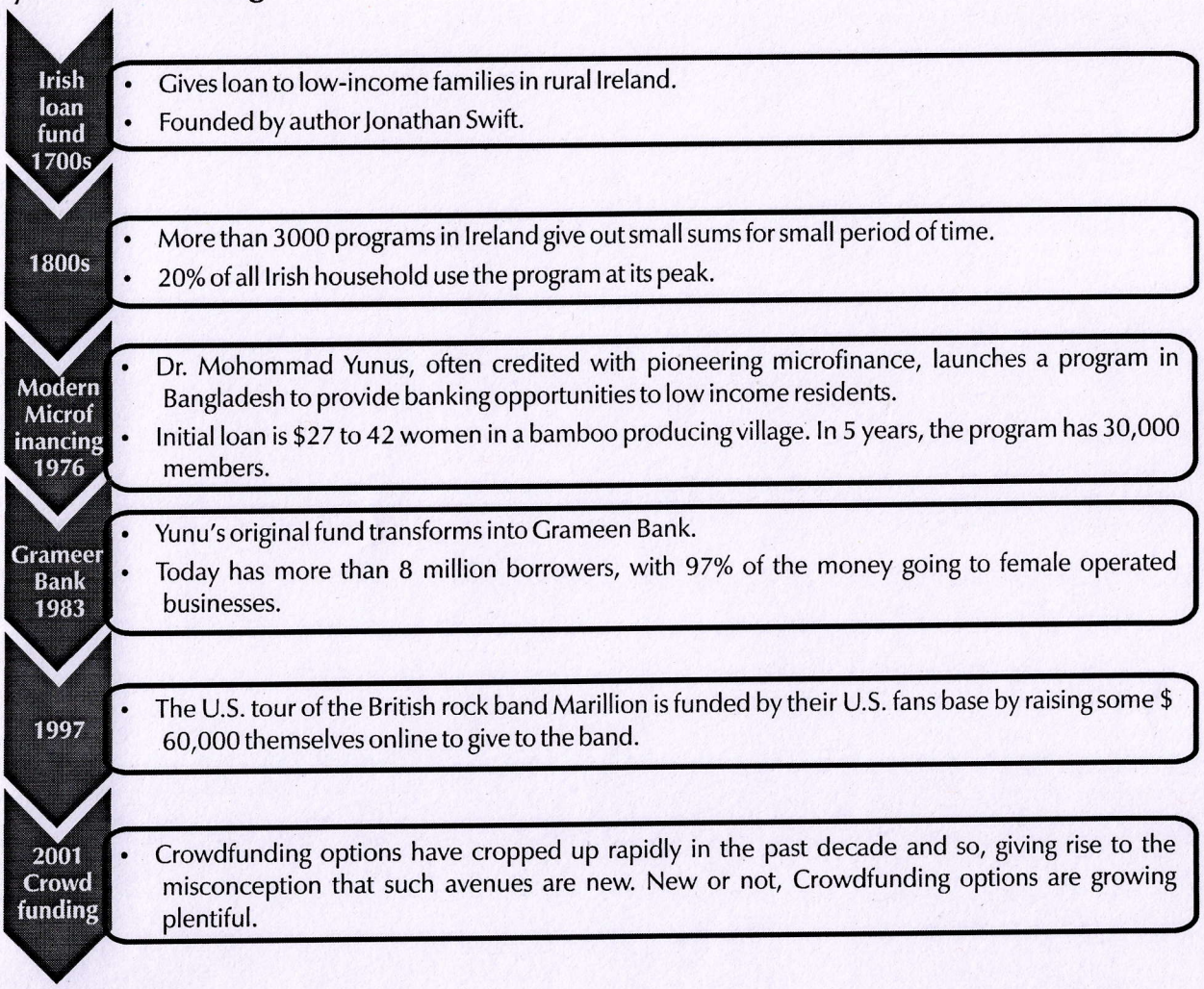
In 2007, LendingClub.com launched the second peer-to-peer lending site in the U.S. Its object was to create substitute to banks. Lending Club has surpassed Prosper in loan funding.

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In 2009, Kick starter launched as a new way to fund creativity. The company also helped bring a new term to the forefront: "crowd funding," which allows a large group of people to pool their money to help fund an idea. Projects range from documentaries to iPod wristwatches.

Finally, in 2012 the first business funding platform was set up in line with the JOBS guidelines, Fundable. Fundable paved the way for a new era in entrepreneurship and business growth. This was the first online platform that protected both the investor and the business.

History of crowd funding



INDIAN SCENARIO:

National Crowd funding Association (NCFA) of India is an organization to promote crowd funding in India. NCFA provides its members with opportunities to shape the industry, learn the details of the marketplace, and stay informed and ahead in this dynamic industry. The mission of NCFA is to support, educate, and establish the Indian crowd funding market. NCFA India holds an independent position with membership open to the general public including interested parties such as entrepreneurs, investors, lawyers, technologists, financial advisors, regulators, educators, students, media professionals, and those who serve the industry, whether donation-based or equity-based. In the next six months or so, many crowd funding platforms are expected to be in India. Worldwide, nearly a thousand such platforms will be launched. Recently, platforms such as Wish berry and Ignite Intent have been launched in the country. Most of them are in the rewards and donation space, as there aren't too many regulatory issues around this model.

There have been attempts at crowd funding for events like the Goa Project and campaigns like Teach for India. Crowd funding is slowly becoming an alternative funding channel for the film industry. Film Director Pawan Kumar from Karnataka recently raised

Rs 51 lakh using Facebook and other platforms. A low trust level of doing things online is also a challenge. India's e-commerce space needs to really mature before anything substantial can happen in this space. People need to be spending more and more online for them to even start thinking about backing projects online.

CHALLENGES IN INDIA

1. Crowd funding is not new in India. Indians are always ready to donate money to the charitable organizations. Due to this places of worship are built overnight using a large number of donations. However, the concept of online crowd funding is new to the country.
2. This is the new concept to Indian investors. Indian investors are more conservative and not friendly. People will take some more time to accept this concept.
3. A low trust level of doing the things online is also a challenge. India's ecommerce space needs to really mature before anything substantial can happen in this space. People need to be spending more and more online for them to even start thinking about backing online projects online.
4. As long as the crowd funding platforms are not making any financial promises to the contributors, they should be theoretically safe to operate. However to build a credible case for the industry to grow in India, it would do help if these platforms proactively approach the regulators and work with them to processes so as to build long-term credibility and transparency.
5. Ecommerce in India only got a boost when they initiated the concept of cash on delivery. Similarly, crowd funding will have to look at building an offline base to finally induce mass awareness and encouraging larger participation.
6. In foreign countries, if you are funding a company through a crowd funding platform – you can hope to get some shares in the company and profit from the success of the company. However, this is not possible in India.
7. Here, capital markets law and regulators such as SEBI doesn't allow raising money from the public in this way with a promise of return on investment of any nature - unless someone can go through the complicated and costly procedure of listing on a stock exchange.
8. SEBI has hence tightened the screws of the system, and it is practically impossible for a startup to raise money from the public – until it becomes profitable and reaches a big scale. Crowd funding is not legally recognized capital market transaction - and the investors cannot get shares in the company they are funding. No separate law has been made to allow this to support startup companies.
9. What can be offered to the crowd funders as incentive is debatable question Entrepreneurs looking for crowd funding, hence, tread a thin line with respect to offering any incentives.
10. At the time of raising funds promises are given to the donors. It is moral responsibility of entrepreneurs to keep and fulfill promises. The funding platforms could act as a watchdog to a certain extent.
11. Donors can ask about the utilization of funds. Hence it is necessary to maintain standard accounting system and audit should be done. In this connection transparency should be kept. The future of crowd funding, even in its charity and donation avatar, pretty much depends on this. Otherwise some crowd funded entrepreneurs may end up spending their funds on the much needed vacation.
12. Crowd funding give rise to issues pertaining to securities regulation, especially if monies are raised against issuance of securities that provide investors with some interest in the issuing company.

LEGAL ISSUES:

There are legal issues around crowd funding in India. Donation-based crowd funding is the most pragmatic approach as of now. Lending-based microfinance platforms like KIVA need approvals from the central bank. The Reserve Bank of India in 2011 approved Milaap, a non-profit microfinance institution to crowd fund from the overseas. In India, the concept is catching up fast and is posing a danger at the same time. Many money laundering schemes might run in the name of crowd funding via social

media, pushing SEBI to set up a regulatory framework if it is found that such platforms involve large amounts of money or issuance of securities. A discussion is on to find a separate agency for such activities following a talk with various stakeholders like RBI, Finance Ministry and Corporate Affairs Ministry. SEBI stated that apart from setting up new rules after discussions with the stakeholders, any crowd funding involving sale of securities can be either regulated under SEBI's existing norms for Collective Investment Schemes or Alternative Investment funds. Equity based online crowd funding is not legal in India yet.

JUMPSTART OUR BUSINESS STARTUPS ACT (JOBS) ACT:

Equity-based online crowd funding was made legal in the US after passing the Jumpstart Our Business Startups Act (JOBS) act. Some of the key points of this Act are:

- The JOBS Act has put much restriction on the amount that can be borrowed via crowd funding.
- The Act has put an audit compulsion by certified public accountant in some cases of crowd funding. Disclosures need to be made by the company raising funds and utilizing it.
- The company needs to explain everything about its project for which it is raising funds. The fund utilization plan needs to be disclosed.

START51:

Start51.com offer new creative fund platform to transform unique ideas into reality. People from different domains like film making, music, designing and many other can register in start51.com and can start a project. Every project will be created independently with targeted amount be raised. Having complete control over the project, creator needs to set a funding goal and deadline for the venture. For every interesting and valuable project, contributors fund a particular amount to make it real. All the funding activities are followed by all-or-nothing policy.

CONCLUSION:

There is no doubt that crowd funding is rapidly being looked upon as a serious way of raising funds for startups and new businesses. The US and European authorities have started implementing new laws for this to function. India yet will have to change the rules and regulations in the present laws. SEBI with the consent of Central Govt. has to modify its present system. If India brings in requisite laws to support, crowd funding system can really play the role of catalyst in bringing the startup ideas into reality.

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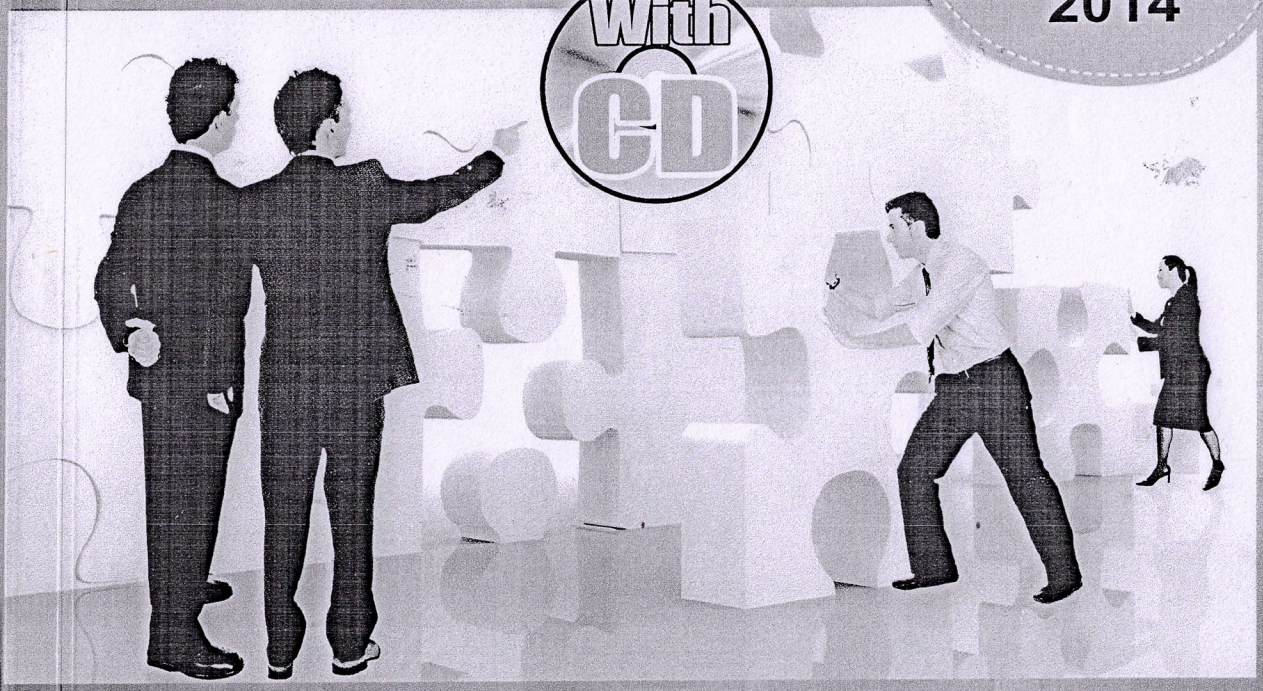
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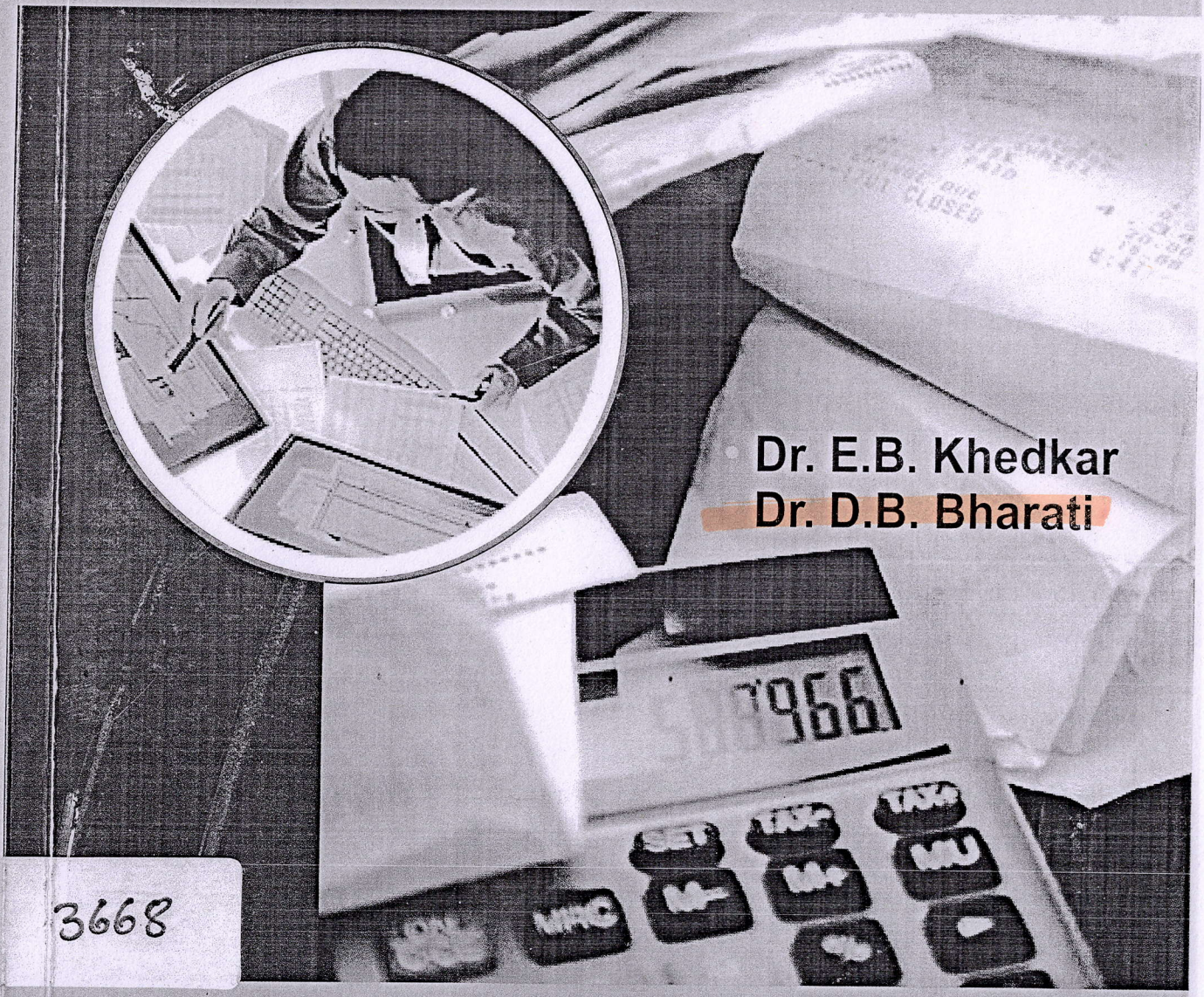
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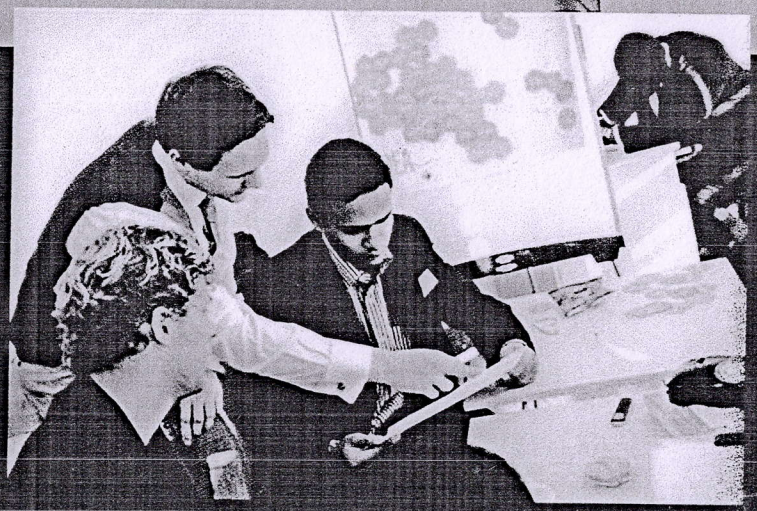
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