

‘HR TECHNOLOGY’: AN EXPECTED DISRUPTION THAT CHANGES THE BLUE PRINTS OF BUSINESS

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ABSTRACT

The Fourth Industrial Revolution is bringing in new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies, and industries. This time, the change in the world of work is enormous. As with all other aspects of life, technology is fundamentally transforming the workplace in an unprecedented manner. Emerging technologies such as robotics and AI are dramatically changing the nature of jobs and consequently the skills that organizations are looking for from their people are also changing. AI and technology will be a significant enabler of HR processes, but cannot replace all of them, since judgment, emotions and the contextual application of HR processes cannot be completely replaced. This paper presents the perceptual analysis of various HR and Non HR professionals on various HR technology related aspects. The main research drivers were focused on technological changes in HR to annual engagement surveys in organizations, Age and people resetting back to old ways even if AI is brought to work place, organisation work culture and change in technology in avoiding repetitive tasks carried out by employees.

Key words: *HR Technology, disruptions, Fourth Industrial revolution, Robotics, Artificial Intelligence*

Introduction:

As part of our work force strategy building, once we visited a company. We were eagerly waiting to meet the HR representative of the company, in the mean while we started asking the front desk employee about the company i.e. its inception, *various products in*

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. To explore this, our research paper takes a peep into the perceptions of various HR professionals working in various industries towards technological revolutions happening in their field and impacting the organizations as a whole, secondly it looks into the incremental changes organizations need to make today, to the trends that will influence both employees and the employers, it also throws some insights into how individuals, leaders, and organizations will fare in the “race against the machines”.

Role of HR: Equip for tomorrow’s workplace, today!

Adaptation is the key and early towards it will give us the competitive edge! Business sustainability would mean one and only one thing — preparing for the future! And how does one do that? By making the workforce future-ready! This is where HR will be the pivotal force in leading the change. HR has been experiencing significant changes. Thanks to the evolution of information technologies in the last two decades. Today, AI is reshaping the way that companies manage their workforce and make HR plans, which increases productivity and employee engagement in general. While organizations realize that to prepare for the future is to invest in both technology and its people, HR will have to partner with technology and use it as the key enabler for skill enhancement. There are many ways HR can leverage AI to be future ready. The impact of AI on HR is significant, according to a survey of HR executives by IBM, which found that 46 percent believe AI will transform their talent acquisition capability while 49 percent believe it will transform their payroll and benefits administration.

Will AI replace HR?

Several studies and cutting-edge logic will indicate that AI technology will support, rather than replacing HR. Here are few areas where AI can empower HR and make informed decisions.

1. Unbiased Candidate Screening
2. Candidate Outreach and Assessment
3. Talent Insights and Development
4. Improve Compliance and Legal Counsel
5. Personalized Learning and Career Development
6. Real time Dashboards and Reporting
7. Predictive Attrition and Retention

8. Cognitive Compensation

Statement of Research problem

The most important of all the issues is how agile are the people in the organizations to get along with the changing technologies in the field of HR. Right from recruitment to separation of an employee the entire processes are technology driven and have changed drastically. People today are not looking for life full of a carrier they are looking for life full of carriers, hence Engaging them with their current job is at most important task and majorly these engagement levels have changed a lot from annual to hourly feedback and secondly AI has taken a major share in today's workplace and are replacing humans in certain areas, but the challenge to organizations is, do the senior most people in the organisation working from long time will reset back to old ways of doing things even if AI is brought to work place. Finally as most of the HR people spend most of their time on repetitive tasks if these are automated how will be the organizational work culture.

Need and significance of the study:

The study aims at suggesting the ways organizations need to upgrade and be prepared for the technological changes that are going to impact their performance. The findings from this study may help the organizations to improve the competencies of the employees to cope up with these changes and designing the work culture due to changes in the nature of work due to introduction of AI.

Objectives of the study

The study has been formulated based on the following objectives

1. To analyze the significance of Technological changes in HR to annual engagement surveys.
2. To assess the relationship between Designation and people resetting back to old ways based on the responses collected.
3. To analyze the relationship between organisation work culture and technology to avoid repetitive tasks.

Hypothesis

Based on the pilot study conducted and the various literature reviewed, connected with the study, the following hypothesis were framed.

H1- There is no significant relationship between technology changes in HR and annual engagement surveys in the organisation

H2- There is no significant relationship between the designation and Work experience and people resetting back to old ways even if AI is brought to work place.

H3- Organisation culture has no significant relationship on change in technology in avoiding repetitive tasks carries out by employees.

Research Methodology:

Research Design: This research will follow Descriptive Study. These are formalized studies which are typically structured with clearly stated hypothesis or investigative questions.

Data sources: The research study has employed both primary and secondary data for the study. The data required for this study was collected with the help of a structured questionnaire, designed to elicit required information and data on the subject based on the objectives of the research study using convenient sampling method. The secondary data was collected from relevant sources.

Sample: 120 HR and Non HR professionals.

Analysis: The collected data has been analyzed with chi square analysis. The rating scale is broadly divided into Agree, Neutral and Disagree.

Limitations: As with any research study, this study too has limitation. The limitation stem from the fact that the survey was circulated to diversified group of HR people and is generalized.

Approach to the study: The study reports the analysis of technology changes in HR to annual engagement surveys in the organization and people resetting back to old days even if AI is brought to work place and Organization work culture and change in technology in avoiding repetitive tasks carried out by employees.

Analysis of results and hypothesis related discussion:

In order to analyze the impact of technology advancement in HR to Annual engagement surveys statistical test is applied to determine the relationship.

H1 : There is no significant relationship between technology changes in HR to annual engagement surveys in the organization.

Degrees of freedom :- (row-1) (column-1)

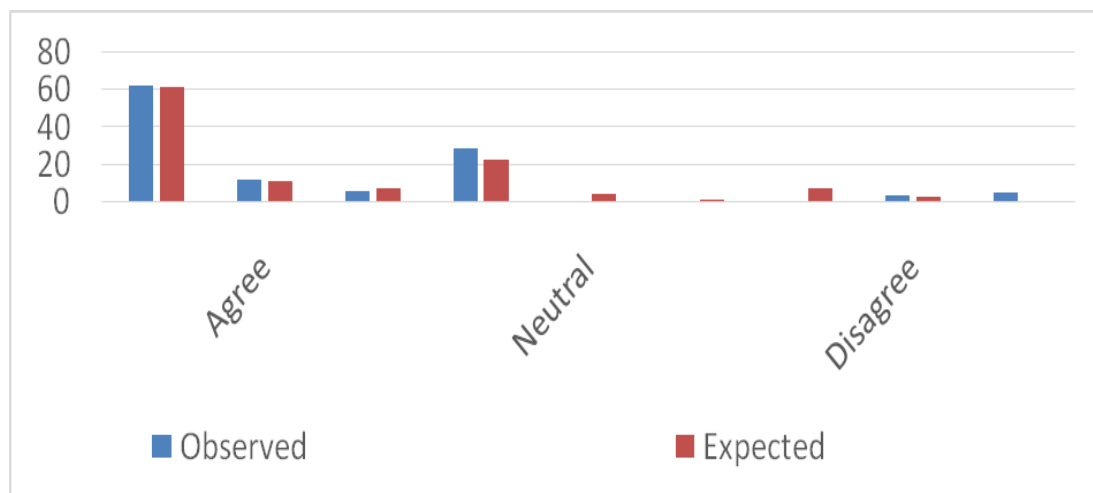
$$= (3-1)(3-1)$$

$$= 4^0 \text{ of freedom}$$

Chi-square at 95% level of significance and 4⁰ of freedom = 9.488

Particulars	Agree	Neutral	Disagree	Row total
Agree	62	12	6	80
Neutral	29	1	0	30
Disagree	1	4	5	10
Column total	92	17	11	120

Particulars	Observed	Expected	(O-E) ² /E
Agree	62	61.33	0.00731
	12	11.33	0.0396
	6	7.33	0.363
Neutral	29	23	1.565
	1	4.25	2.485
	0	1.41	1.41
Disagree	1	7.67	5.8003
	4	2.75	0.568
	5	0.916	18.208
TOTAL			30.4462



Interpretation:- The calculated value(30.4462) is greater than the table value (9.488) , so the null hypothesis is rejected. Hence it can be inferred that there is relationship between technology changes in HR to annual engagement surveys in the organization

H-2 : There is no significant relationship between designation & Age and people resetting back to old ways even if AI is brought to work place

Degrees of freedom : (row-1) (column-1)

$$= (3-1)(3-1)$$

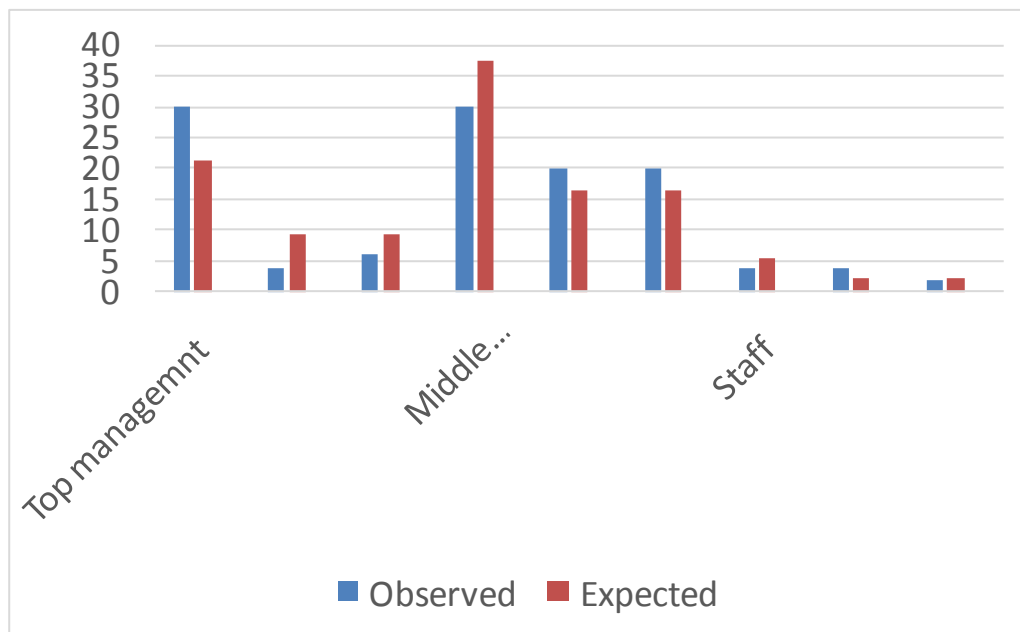
$$=4^0 \text{ of freedom}$$

Chi-square at 95% level of significance and 4⁰ of freedom = 9.488

Particulars	Agree	Neutral	Disagree	Row total
TM	30	4	6	40
MM	30	20	20	70
STAFF	4	4	2	10
Column total	64	28	28	120

	Observed	Expected	(O-E) ² /E
TOP MANAGEMENT	30	21.3	3.553
	4	9.37	3.410
	6	9.33	1.188

MIDDLE MANAGEMENT	30	37.33	1.439
	20	16.33	0.824
	20	16.33	0.824
STAFF	4	5.33	0.338
	4	2.33	1.196
	2	2.33	0.046
TOTAL			12.8118



Interpretation:- The calculated value(12.8118) is greater than the table value(9.488) , so the null hypothesis is rejected. Hence it can be inferred that there is relationship between designation & Age and people resetting back to old ways even if AI is brought to work place.

H3: There is no significant relationship between Organization work culture and change in technology in avoiding repetitive tasks carried out by employees

Degrees of freedom : (row-1) (column-1)

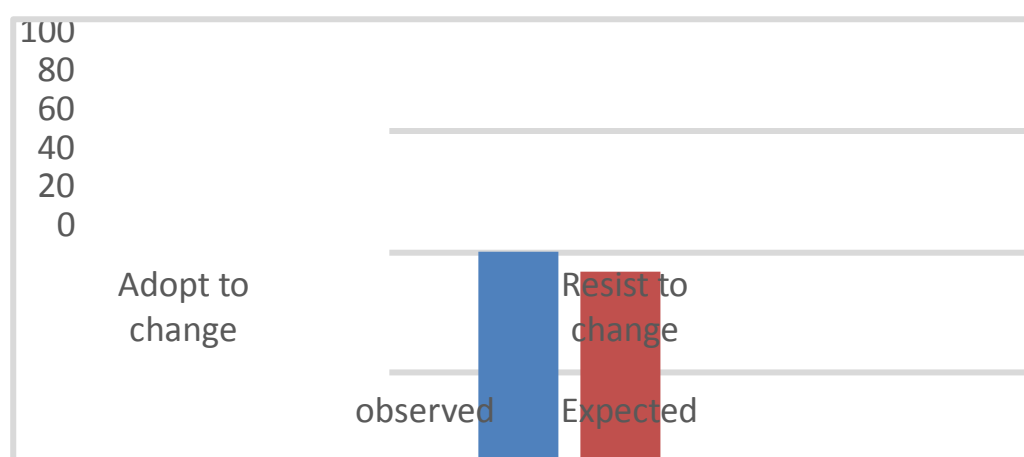
$$= (2-1)(3-1)$$

=2⁰ of freedom

Chi-square at 95% level of significance and 2⁰ of freedom = 5.99

Particulars	Agree	Neutral	Disagree	Row total
Adopt to change	80	10	0	90
Resist to change	22	2	6	30
Column total	102	12	6	120

Particulars	Observed	Expected	(O-E) ² /E
ADOPT TO CHANGE	80	76.5	0.160
	10	9	0.111
	-	4.5	4.5
RESIST TO CHANGE	22	25.5	0.480
	2	3	0.333
	6	1.5	13.5
TOTAL			18.971



Interpretation:- The calculated value(18.971) is greater than the table value (5.99) , so the null hypothesis is rejected. Hence it can be inferred that there is relationship between Organization work culture and change in technology in avoiding repetitive tasks carried out by employees.

Major Findings based on Analysis:

Major findings of the analysis made are presented below :

1. The findings show that there is significant relationship between Technology changes in HR to annual engagement surveys in the organisation.
2. The findings of the study on the designation and age in relation to people resetting back to old ways of doing things even if AI is brought into work place showed the positive results.
3. The findings also show that there is significant relationship between organisation work culture and change in technology in avoiding repetitive tasks carried out by employees.
4. Building the organization for the future as the most important challenge for 2020. To this statement of the survey, nearly 60 percent of respondents rated this problem as very important, and 90 percent rated it as important or very important.
5. The concept of a “Learning curve” is being shaken to its core, driving companies toward “always-on” learning experiences that allow employees to build skills quickly, easily, and on their own terms with 83 percent of executives identifying these issues as important or very important. At leading companies, HR’s are helping employees grow and thrive as they adopt the radical concept of a learning curve.
6. Leadership plays a critical role as companies transform and digital organizational models emerge, it needs change as well. Eighty percent of our respondents say that leadership is an important issue, and 88 percent call it very important.

Findings of the study can serve as input to various companies in developing best practices across HR dimensions for improving employee and organisation performance.

Conclusion

Focusing on the implications of technological advancements that are happening across the organizations and specifically in HR the following suggestions are made out of the findings of the survey.

- As per the findings it is suggested that organizations should adopt for frequent feedback practices from employees rather than Annual engagement surveys by deploying modern technologies that are available. This will

enhance the morality of employee and increase his productivity by enhanced engagement.

- The findings also projects employees who are older in age and holding higher designations are not inclined towards aligning with the technological advances that are happening and they are switching to conventional methods of doing the operations. Hence it is highly recommended to improve their competencies by focused training on the areas they are lagging in.
- Another important finding is the change in organizational work culture due to avoiding of repetitive tasks. Today organizations are trying to automate the various activities by optimizing the manpower.
- As per the responses, a clear perception was observed that there are equal chances of creating job losses due to AI and Automation entering the organizations.
- Automation is creating evidence based management in HR. The organizations should adapt to the new technologies at appropriate time to make the function effective.
- Future, organizations should keep in mind while designing the new organization structures to actively build organizational ecosystems and networks. HR leaders need to be built with the skill of Agility as it plays a central role in the organizations future.
- Today, companies are looking at employee journeys, studying the needs of their workforce, and using net promoter scores to understand the employee experience to keep them in line with the organizational vision.
- Organizations are making hue and cry for more diverse, and younger leaders, as well as new leadership models that align with the “digital way” to run businesses. While the leadership development continues to be a struggle, companies are pushing the boundaries of their traditional leadership hierarchies, empowering a new breed of leaders who can thrive in a rapidly changing network.
- At most companies, the learning management system (LMS) is among the oldest and most challenging to use. Today a new set of learning tools has entered the market, which will provide curated content, video and mobile learning solutions, micro-learning, and new ways to integrate and harness the exploding library of external MOOCs and video learning available on the Internet.

Avenues for further research:

The technology has taken a manifold jump from past days to current. Still the drastic changes are going to happen in the near future. IOT(Internet Of Things), Chat bots, Artificial Intelligence (AI), BOT's, Blockchain, VR are no longer tech buzzwords. They have gone mainstream and are shaping the world of work.

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E TOURISM

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ABSTRACT

E-tourism also known as travel technology or 'e-travel, e-tourism refers to a phenomenon and research area in which the adoption of information communication technology (ICT) by tourists and businesses transforms the processes and the value chains in the tourism industry. This development changes the process with in a business or organization while reconfiguring the land scape of commerce. As service industry, tourism specifically influenced and transformed by the development of ICT. The acceptance of e-commerce in tourism industry has witnessed rapid global change in terms of accessing tourism product and services. Online transactions is just not concerned with gathering information, but also helps in ordering and enjoying various tourism facilities, services and products. e tourism is digitization of all the processes and value chains in the tourism, travel, hospitality and catering industries that enable organization to maximize their efficiency and effectiveness.

This paper generally discussed about the , impacts, and perspectives of e tourism .

KEYWORDS

E- tourism, growth and impact Indian economic development.

INTRODUCTION

A long with the exponential growth of extension and using the internet and the A long with the exponential growth of extension and using the internet the World Wide Web, both at home and work, have increased also opportunities for travel providers to distribute information and to process booking for potential buyers.

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The development processes within the information technology, communications and internet. Have revolutionized. Beginning with 80s, the Information and communication Technologies (ICT) transformed the domain tourism globally. The achievements in the ICT domain changed undeniably the practices, the business strategies, but also the industry structurally. The land of India represents an example of diversified geographical features with its mountain ranges, valleys, desert regions, dry plateaus, coastal areas etc. That attracted the tourists from all over the world to give a glimpse to this mysterious land of geographical diversities.

E-tourism is the digitization of all the processes and value chains in the tourism, travel, hospitality and catering industries that enable organizations to maximize their efficiency and effectiveness. There is an emergent e-commerce sector in tourism, the so called e-tourism. E-Tourism is a way of establishing commercial relationships using the Internet for offering tourism related products: flights, hotel reservation, car rental and so on. Concerning e-commerce applications, this kind of services are classified into the business-to-consumer (B2C) category, as the final customer is in the other side of the transaction.

1. THE TECHNOLOGICAL PROGRESS

The tourists appeal more and more often to the sites of touristic information and especially to the sites that also allow bookings for accommodation or transport services. Thus, the tourists have the following expectations from the websites' services: the facility in using, the utility, the informational content, the security, the rapidity in operation and the personalization. If at one moment it was thought that choosing a holiday destination represented the common choice of the adults in a family, the recent researching revealed the more and more important role of the children in this process. Thus, the managers of touristic destinations who target the young public should offer, using the online means, content as adequate as possibly to this public, like the interactive games in order to attract this kind of public in visiting their sites.

The multimedia technology became, too, one of the key domains of development and it influences also the tourism field. The tourism, as all different activities in the tertiary sector field, needs an expensive support using the multimedia representations in order to offer an image or a tangible experience to the customer. In the domain of touristic promotion, an image will always have a bigger value than one thousand words. Using the 3D animation or the video clips, the interaction and the enriching of the touristic information can be done and it can also lead to the creation and

the transmission of the image to the destination. The virtual tours were adopted by the online companies to attract customers and to encourage the online buying products and touristic services, in order to maintain the customer's loyalty. The tourists can visualize the touristic information within the digital maps with aerial perspective in both 2D and 3D representations. The wireless networks, together with the mobile networks, allow the users the connection of the communication dispositive to the global network, being widely used in hotels, airports, pubs etc.,

2.2 INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)

A good way to think about ICT is to consider all the uses of digital technology that already exist to help individuals, businesses and organizations use information. The concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis. It's difficult to keep up with the changes-they happen so fast ICT over any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form.

2.2.1 ICT IMPACT ON THE TOURISTIC MARKET

The information and the communication technology situates the final customer in the center of the production process. Each tourist is different, everyone having a unique of experiences, motivations and solicitations. The contemporaneous customer is less and less disposed to wait for obtaining the interest information and, thus, the key of success within the tourism organizations consists in the fast identification of the customer's necessities and saluting the potential customers with offers as various as possible, personalized and updated to the actual tendencies.

The communication technology had a direct impact on the organizations; this thing determined the adjusting of two fundamental dimensions of the competitive advantage: the cost difference and advantage. Moreover, it is compulsory, presently, for the undertakers from the touristic domain to incorporate the informational technology in their efforts to improve the quality of the services, because ICT allows the organizations to make differences and to specialize in a dynamic way the series of products and services. The internet allowed the organizations to be able to distribute their products directly and also by a variety of new channels of distribution. The tertiary intermeddlers, including the online tourism agencies and the searching engines, respectively the web directors of profile, Succeed in making a distribution of the information of static, but also dynamic type, as the availability or the price.

The dramatic growth of social media platforms such as Facebook, Twitter and YouTube in recent years is increasingly being felt in the travel and tourism sector. TripAdvisor (www.tripadvisor.com) is one of the most successful social webs in the tourism domain and facilitates the possibility to evaluate the hotels all around the world and reunites users from the forums. The Internet is one of the technologies that have managed to deeply the tourists' behavior, the research made (Luo, 2004) showed that tourists who get information on the Internet concerning the touristic destinations tend to spend more money on their trips than those who prefer other sources of information. The tourism industry offers the largest variety of applications of e-commerce.

OBJECTIVES OF THE STUDY

- *To analyze new business trend in e tourism
- *To study the effectiveness of information technology on tourism
- *To understand the concepts of e tourism in entrepreneurship development
- *To understand the significance of ecotourism
- *To know current trends and practices in e tourism in India
- *To study the vast tourist resources in India
- *To identify and manage emerging tourist destination in India

E-TOURISM AROUND THE WORLD

The electronic commerce is defined as the activity of sale and marketing for products and services through an electronic system such as, for example, Internet. It involves the electronic data transfer, the distribution management, e-marketing (online marketing), online transactions, electronic data changes, the automated inventory of used management systems, and automated data collection.

E-Tourism (electronic tourism) is a part of electronic commerce and unites one of the fastest development technologies, such as telecommunications and information technology, hospitality industry and the management/ marketing/ strategic planning. The specific activities of the E-Tourism assume the existence of the tour operators, of the travel agencies and other entities with interests in tourism field in virtual space through a specialized portal. The phenomenon itself, has implications for both travel consumer and for tour operators, travel agents. E-tourism involves for the final consumer the following aspects: e-information, e-booking (hotels, transportation, etc) and electronic payment.

3.1 E-INFORMATION

E-information stage involves providing information in specialized portals, electronic brochures, audio travel guides, photo albums, real-time image or videos, and even travel diaries through blogs or specialized virtual communities, such as virtual Tourist, and why not the guides offered through virtual cities

3.2 E-BOOKING

Online booking are mostly used in hotel area, airline and car rental services. Online booking services, as informational society services, must comply with the legal requirements which have their source in the regulations that refer to Internet services in general, and the e-commerce and distance contracting, in particular.

3.3 E-PAYMENT

The consumers can use credit cards, electronic checks, digital cash or even micro cash. Many electronic payment systems on the internet are the electronic equivalent of systems used every day, such as credit cards or checks. The effectiveness of Internet marketing can be determined pretty fast and accurate by providing statistics, obtained through online technologies, which helps to create the profile and actions of the customers, finally leading to a better knowledge and adaptation to the target's necessities.

E-TOURISM IN INDIA

The revolution of the Internet and information and communication technologies (ICTs) in India has already insightful repercussions for the tourism industry. A whole system of communication technologies and the Internet has been rapidly diffused throughout Indian tourism sectors. Subsequently, online travel bookings and associated travel services are accepted as one of the most thriving e-commerce implementations.

Tourism has closely been connected to progress of information and communication system for over 10 years in India. The tourism industry initially concentrated on utilizing information system to increase efficiency in processing of information within and managing distribution. During the last decade of 20th century, India saw the emergence of e-tourism, its innovation and growth. It is because of the online revolution and its utility where the tourists are more interested to get information on destinations, facilities, availabilities, prices, geography and climate and present status of friendly relation. This led to the development of e-commerce strategies in tourism industry

and more services in the form of online hotel booking, flight booking, car booking, bus booking came into forefront as online services provided by the big online travel companies such as Travelchacha.com, Makemytrip.com, Yatra.com, Cleartrip.com, Arzoo.com, Travelguru.com, Travelocity.co.in etc. On these sites, the travelers have wide option of exploring details of hotels, flights, cars, buses and other allied services. At present, the information and communication technology supports all operative, structural, strategic and marketing levels to facilitate global interaction among suppliers, intermediaries and consumers around the world and Indian players.

Now in India the online travel bookings and associated travel services are recognized as one of the most successful e-commerce implementations. Many tourism-related organizations had to go through a major business processes re-engineering to capitalize on the emerging technologies in order to transform their service process and data handling to match the global standard. More specifically, the opening up of the Indian market for foreign players and the changes in the aviation industry policy attracted large number of international players across the world to establish their business centers in India.

The foreign players were brought in their technical know how's and their innovative business process into the Indian market that contributed to the forceful adoption on technology and information system of tourism players to stay alive in the competitors. The global business dimension also increased the demand of international consumptions and tourism related services both domestic and international, which made the tourism associates to re-engineer their products and process to match the expectation of the market. According to 2013 CNN global travel survey, India is now one of the top tourism destinations in Asia as it has received 3.3 million foreign tourists during the first half of this year. Currently the Indian market is well equipped and competitive as any of the international tourism market across the world as it was able to adapt to the rapidly changing IT enabled tourism process and service delivery by partnering with international participants. The amount of foreign direct investments (FDI) inflow into the hotel and tourism sector during April 2000 to April 2013 was worth US\$ 6,664.20 million, as per data provided by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce.

5.1 TOP 5 TOURIST PLACES IN INDIA

If you are planning a trip somewhere in India, it may be the hardest job for you to choose one of the most popular tourist destinations in India. As India is blended with the

unbeatable attractions and beautiful places that can be visited any time of the year, so picking a right destination might be a bit confusing task for anyone. The list of top 5 tourist destination in India are shown below.

1. KULU MANALI
2. GOA
3. MUNNAR
4. AGRA
5. MUMBAI

E-TOURISM PLAYERS

The main actors in the tourism industry include governments, tour operators, hotels, airlines and other transport operates, and tourist or consumers. Each of these actors has a stake in the development of the electronic market. Each is expected to be effected in different ways by the changes brought about by electronic commerce. The concerns and interests of these stake holders need to be addressed in order to ensure that changes are managed and promoted to the benefit of all. Each of these players utilize information and communication technology in their processes to complement each other on making e-tourism efficient. Some of the e-tourism actors performed by the main stake holders are discussed below.

- E-Airlines
- E-Hospitality
- E-Tour operators
- E-Travel agencies
- E-Destination

E-TOURISM AND THE FUTURE

E-tourism represents the paradigm-shift experienced in the tourism industry as a result of the adoption of ICTs and the Internet. There are both challenges and opportunities emerging but the competitiveness of all tourism enterprises and destinations has been altered dramatically. Organizations which compute will be able to compete in the future. Although ICTs can introduce great benefits, especially in efficiency, coordination, differentiation, and cost

reduction, they are not a universal remedy and require a pervasive re-engineering of business processes, as well as strategic management vision and commitment in order to achieve their objectives.

The emergence of the internet altered the structure of the travel industry. Overall, consumers benefited the most as their bargaining power increased due to their ability to access accurate and relevant information instantly and to communicate directly with suppliers, while benefiting from lower switching costs. The internet led to the intensification of rivalry among tourism suppliers as it introduced transparency, speed, convenience and a wide range of choice and flexibility in the marketplace.

The need for traditional intermediaries to shift their role to consumer advisors is becoming evident and unless TAs and TOs utilize internet tools for building and delivering personalized tourism products they will be unable to compete in the future. Although the tourism industry structure has been altered dramatically it is evident that both tourism suppliers and online intermediaries should apply constant innovation, in terms of marketing techniques and technological advancements, in order to be able to offer differentiated, personalized, tailored and value added products. The key point for sustaining their competitive advantage is to focus on their core competencies and to exploit the opportunities that technology offers to improve their strategic position in the tourism value system. Switching costs. The internet led to the intensification of rivalry among tourism suppliers as it introduced transparency, speed, convenience and a wide range of choice and flexibility in the marketplace.

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CONCLUSION

The outcome of the study shows the impact of ICTs are becoming clearer, as networking, dynamic interfaces with consumers and partners and the ability to re-develop

the tourism product proactively and reactively are critical the future of e-Tourism will be focused on consumer-centric technologies that will support organizations to interact with their customers dynamically. The development of new and more powerful ICT application empowers both suppliers and destinations to enhance their efficiency and re-engineer their communication strategies. Innovative technologies will support interoperability, personalization, and constant networking. Social media are getting more and more important to help consumers plan and enjoy travel as they switch to online and mobile technology. Travelers are socially connected not only before and after but also increasingly during their trips thanks to mobile devices. Today the tourism market is rapidly changing and is looking continuously grow and change business and the process that will increase the efficiency of the tourism consumption.

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FOREST WOOD AS FUEL OF RAILWAY ENGINE

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INTRODUCTION

Forests are renewable resources and contribute substantially to economic development of a country. Forest provides us bamboo and wood for fuel, grass, charcoal, packaging and many other things. Between 1700 to 1995, the period of industrialization, 13.9 million sq km. of forests or 9.3% of the world's total area was cleared for industrial uses, cultivation, pastures and fuel wood. Under the colonial rule, deforestation became more systematic and extensive. Wood was used as fuel to run locomotives and sleepers were required to hold tracks together. Railway required not only sleepers but also fuel and timber for carriage and wagons. But the areas were far from the source of coal, The Railway department was allowed to cut wood for fuel from forests along the tracts. Private forests were cut down on a large scale to supply fuel to Railway. The tall sal and other trees were felled down to provide sleepers for Railways. India's forest area is estimated to be about 64 million hectares, or 19.5 percent of the country's area. India is the world's largest consumer of fuel wood. The country's consumption of fuel wood is about five times higher than what can be sustainably removed from forest, however, a large percentage of this fuel wood is grown and managed outside forests. Fuel wood meets about 40 percent of the energy needed by the country. About 70 percent of the fuel wood is used by households and the rest by Railways, commercial and industrial units. Around 80 percent of rural people and 48 percent of urban people use fuel wood.

It will be noticed that out of a total supply during the years out of 68,420 tons, only 12,660 tons came from Government forests, the rest being drawn from private lands. The Government supplied from the forests in the Kodur valley, of the Cuddapah District, yielded 8,860 tons, while 2,750 tons were obtained by cutting the trees in the Mamandur and Ambur reserves of North Arcot.

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The Government forests in Salem and Coimbatore furnished only a few hundred tons each.ⁱ In a letter of February 1878 the Agent of the Madras Railway stated the approximate requirements of wood-fuel as follows:-

CITIES	TONS.
Shoranur, Palghat, Pothanur	14,500
Salem, Mallapuram, Jalarpet, Kuppam, Bangalore, Vaniyambadi ...	30,000
Arkonam, Tirupati, Kodur, Cuddapah, Kondapuram, Gooty	43,500
Raichore	3,000
Total	91,000

Environmental Concerns over Logging and Timber Processing in India

Environmental awareness has never been a strong suit of the natural resource industry. However, wasteful and destructive timber harvest practices may have become even more prevalent in India today. Indian government has been implementing a series of economic measures including a gradual increase in export duties on round-wood and direct subsidies for timber processing capabilities in India the goal of which is to shift timber exports from unprocessed to processed wood. Ironically, the economic policies of the last five years have both positive and negative effect on the ecological situation in Indian forests. Whether negative or positive effects will ultimately prevail in the long run remains to be seen.

Impacts of the Construction of Railways

Indian Railway system from its beginning in 1853 had linked local centers to each other and to the world by rail. These links had a profound impact on Indian Economy. From time immemorial Indian cotton, spices, perfumes, jewels, pearls from south Tamil Nadu had attracted Greek-Roman world. The introduction of Railways had disastrous consequences too. The construction drained India's economy, depleted the country's forest resources facilitated the import of every material from Britains and dealt a blow to the indigenous interest in the domestic market. British commercial imperialism and consequent greed for getting the raw materials at a throw away price

were the main motivating factors behind the laying of railway lines. India offered fresh field for investment of their surplus money and they amassed in colonial trade.ⁱⁱ

Sasilekha, a news paper from Madras, criticized the mania for constructing more Railways and said, "337 crores had been wasted on Railways". Swadesamitran suggested various means of remedies to strengthen Indian economy but not the way of building Railways. G. Subramaniya Aiyer in his evidence before the Royal Commission set up by the British to study the real condition in India on May 21, 1897 asserted that the benefit of Railways was exaggerated as the peculiar economic condition of India rendered less progress. His first objection was to drain India's resources by the heavy borrowing for the construction of Railways and payment annually of heavy interest which was according to him, bleeding India to exhaustion.

Vrittanta Chitamani a news paper argued that the Railway authorities tended to think that the comfort of the third class passengers need not be attended to as they were drawn from poor classes, but of the Railway receipts, 75 per cent came from 3rd class passengers. It further added that the maximum income was earned from a class of passengers who were put into great inconvenience as all categories of passengers were herded together like sheep. The paper concluded its observation by remarking that often passengers were packed like sacks of corn in ill-ventilated goods wagons.

Role of Freedom Fighters

The industrial workers were made to realize the importance of national independence besides their own independence from the colonial administration. All section of Indian population who were affected by British colonialism rallied under the banner of Indian National Congress by formulating a well defined policy in every matter in national importance.ⁱⁱⁱ The Congress leaders like K. Bashyam, S. Sathiyamurthy, and T. Prakasam began to take active interest in the Railway workers. The growth of communist movement promoted working class solidarity. Leaders like Pakirisany Pillai M. Singaravelu and Mukundalal Sirkar impressed the labourers. K.P. Gopalan, P. Jeevanandam, K. Murugesan, P. Krishnapillai appealed to the people and the workers to unite together for the cause of political freedom and economic liberty.

The working class leaders like V.V. Giri, B. Shiva Rao, G.Chelvapathy Chetti and S.R. Varadarajulu Naidu attributed the sufferings of Indian masses to British imperialism. V.V. Giri urged the workers of the union to unite and fight the British.

The Indian nationalists recognized the symbolic significance of Railway station as communication centers. The visit of Prince of Wales to India was greeted by a hurle in July 1921 when he landed at Bombay. His visit to Madras on 14th January 1922 was boycotted by Thiru Vi.Ka, Varadharajau Naidu and V.V. Subramaniya Iyer. Thiagarajachetty was prevented from attending the function organized to welcome Prince of Wales.

Imports of wood and Forest Conservation

The idea of protecting the forest was initiated as early as in 1865 in the Madras presidency. This was not for maintaining ecological balance or preventing soil erosion but ensure constant fuel wood supply to the Madras Railways. Between 1873 and 1877, about 354921 tons of wood was purchased for Railway fuel. Brandis, the Conservator of Forest in the Madras presidency, recommended that Railways should be encouraged to extract maximum from private forests and after exhausting those resources Government forests be utilized.

Wood Purchased for the Railways During 1873-1877

Year	Quantity Purchased in tons
1873	44693
1874	55107
1875	57466
1876	77731
1877	119924

Source : *G.O. No. 373*, PWD (Railways) 26th April 1878.

Annie Besant, who took keen interest in helping the suppressed people from forest area gave wide publicity to their grievances in her paper New India and condemned the attitude of the land owners and the peasants. The Hindu criticized the policy of British pointing out that the Railway system not only drained India's resources but caused considerable damage to indigenous industry, which provided means of sustenance to the people for centuries.

The leaders like Peter Paul Pillai and Rev. W.W. Stephenson who were otherwise pro British took up the issue of the aggrieved tribal's. They even criticized the Government and said that the Government taxed 'everything within the forest limits except atmosphere', while the Government obtained more income it did not care to improve the deteriorating condition of the forest dwellers.

Transport and Railways

The provision of better transport and the world demand for goods had a stimulating effect on the production. From 1870 due to the Railways and the gradual increasing trend of world prices, increased the cultivation of cash crops rapidly. C.J. Baker has argued that the export trading and the construction of Railways opened up the interior. According to him the local market always suffered, As Baker wrote: "The completion of the rails network in the later Nineteenth century began to impose some order in the chaos of trading pattern and on the haphazard growth of town." The Chamber also demanded a reduction in the Railway rates for carrying groundnut to Madras from the south for the benefit of merchants. Some 60,000 to 70,000 tons of ground nut was also shipped from Pondicherry annually.

Effects of Railways in Indian Society

In June 1935 a meeting was held at Delhi between Railway officials and the representatives of Chambers of Commerce. Stress was made on the reduction of freight charges on the transport of commodities. The meeting decided in favour of reduction in the freight rates. But the Madras and South Maharatta Railway announced the enhancement of rates for the traffic of certain commodities like sugar, kerosene, tobacco and piece goods. It was the disparity of freight rates that encourage the merchants in Coimbatore, Tirupur and Erode to obtain their requirements in the form of imported rice from Calicut or Cochin.

Railways Contribution to the Soldiers

The movement of battalion from one place to another on the basis of first preference was the order of the day even during World War I. Soldiers movement and the despatch of troops made by the Indian Army Office and the stations classified under several headings were as follows the station **B,D,M,S,T**.

Earnings and Expenditure of Railways in India (Including The Tirunelveli – Quilon (Travancore) Railway(British and Native State Sections)

Year	Capital Outlay	Gross Earnings	Earnings Net	Interest	Company Share of net earning	Gain / loss to share
1879	44196588	3362067	1063253	2095206		-1031953
1880	44677075	3559593	930017	2128643		-1198626
1881	455222730	3755688	1237726	2130568		-892842
1882	45369280	3869668	1402328	2140871		738543
1883	45397614	3758714	1322334	2146579		-824245
1884	46751662	4189049	1402491	2540471		-1047980
1885	49374900	4560126	1581714	2702145		-1120431

Source : *Report on the Administration of Madras Presidency 1871 –72*,^{iv}

Since 1900 the annual losses on Railway account had disappeared and the gain to the state from the Railway investment had become a regular feature. In 1907 a committee on Railway Finance was appointed by Sir John Mackey as Chairman to study the rapid development of the Railway system of India and it should be regarded by Government as one of its important duties.^v From 1900-1914 the country witnessed a period of progress in Railway concern. It was decided that Railway fund will be established for undertaking improvement of the old lines as for constructing new lines and that all lines should be leased out to the Railway companies for management.

Role of Railways in World Wars

During the **World War II** Railways were called upon to supply locomotives, wagons and track materials for the Middle East for which Indian Command assured the defense responsibility. 26 Branch lines were dismantled. Madurai – Bodinayakannur line was one among them. A large number of workshops were diverted to the manufacture of munitions. Perambur workshop in Madras was one of the important workshops of Madras and south Mahratta Railway also used for the same purpose.^{vi} The First World War broke out in 1914. During the war a number of developments took place and it affected the Indian Railways very much. The Railways were asked to carry troops and war materials during the war period. India was not

in a position to import the necessary rolling stock. This position became worse when the Railway resources like wagons locomotives and rails were dispatched to war theaters. Railway workshops were directed to manufacture military equipments and Railway staff were diverted to defense services. Therefore this period was stagnant in respect of Railway income.^{vii} Due to financial requirements of war the capital expenditure on Railway was considerably reduced. Military needs were given preference. Trade and commerce came to a deteriorating state. The Indian public opinion began to blame the British because the British Railway companies carried on traffic according to their earning capacity.

As the **First World War** had an adverse effect on the Railway income, in 1920-21 a committee under the Chairmanship of Acworth enquired into the various aspects of Railway management. Its principal recommendation was the separation of Railway finance from general public finance. His recommendations resulted in a period of prosperity to the management in 1925. It is to be noted here that during this period the Railway line expanded to 42,000 miles. The Committee recommended the formation of Railway board and separation of Railway finance from the genital budget from the Government of India in 1924. It also recommended a number of provisions to stable the financial provision of Indian Railways especially to end the dual management, the company and the state ownership.^{viii}

The expenditure pattern of administration included the cost of the staff employed in Railways, the salaries, the bonus, contribution to provident fund, gratuities, over time allowances, travelling allowances, the main construction and laying of permanent lies. The following table shows the cost paid to the staff employed on class 1 Railway during 1921 to 1924 in Madras South Mahratta Railway and in South Indian Railway. During 1927-28 the railway income showed an increase. Due to the reduction in the passenger fare the great amount of traffic moved from inland to port cities. The increase of income by 1927-28 had contributed to Rs. 5.20 crores in the gross earnings. The Madras and South Mahratta Railway contributed Rs.63 lakhs and South Indian Railways Rs.32 lakhs. The South Indian Railways showed a large increase in earnings due to the heavy demand of groundnut in the European market. The favorable monsoon also resulted in large movement of passengers. The increase in traffic earning of the Madras and South Mahratta Railway set a new record in Railway earnings. Table 9 below gives the figures for the two Railways system and the additional earnings in the province.

Depression in Internal Trade

The Depression in internal trade was reflected in the income of the Railway companies. Low prices and consequent constriction of money flow affected the passenger traffic earnings. Movement of goods to the ports was affected by the collapse of markets and movement away from the port dwindled because of imports were checked by the boycott of Civil Disobedience Movement in the 1930. The decline in earnings was as much due to the fall of passenger traffic as of goods. The income accumulated out of the prosperity of the first six years after the separation of Railway finance and the formation of the railway board in 1925 were wiped out during the depression period. After the separation of railway budget from the general budget there was a considerable increase in the annual revenue of railway income up to Rs. 6 crores. In the years from 1924-25 to 1929-30 the Railways contributed nearly Rs. 36 crores. In 1931-32 the situation became grave in spite of emergency retrenchment measures, deficits continued. Therefore Railway reserve fund was exhausted. In the Madras Presidency the main system of Railways experienced crisis. While the earnings from goods fell down Rs. 64.4 crores to Rs. 58.7 crores a decrease of 5.7 crores, the earnings from passenger traffic fell from Rs. 33.3 crores to Rs. 31.4 crores, a decrease of 2.9 crores.^{ix} The following table shows the gross earnings of Madras and Southern Mahratta Railways from goods and passenger traffic.

Gross Earnings of Madras and Southern Mahratta Railways from Goods and passenger traffic.

Head	1930-31	1931-32	Difference
Passenger	30,308,410	28,823,621	1,484,789
Goods	50,125,820	48,536,647	1,589,173

Source: *Report by the Railway Board on Indian Railways*. Quoted in K.A. Manikumar, *Economic Depression and its impact :The Tamil Nadu Experience 1929-37*, p. 59.

The above figures indicate costly expenses incurred on the former and a low rate of expense the latter. The total number of passengers travelled also decreased in 1930-31 by 5,956,200 in the case of Madras and Southern Mahratta Railway and by 1,270,400 in the case of South Indian Railway.^x

Wedgewood Committee - 1936

Earlier the appointment of Wedgewood Committee in 1936 enquired the condition of railway finance and made recommendations for its improvements. The Committee emphasized the importance of adequate depreciation fund for Railways. Again it proposed the contribution of a satisfactory Railway finance. Economic campaign was launched to bring down the total working expenses under the following heads.

1. Reduction in the strength of subordinate and inferior staff.
2. Reduction in superior staff.
3. Reduction in special pay and allowances.
4. Emergency cut in pay.
5. Revision of the scale of pay.^{xi}

The primary effect of War had large increase in military traffic and in traffic commodities used for war purposes. The shortage of shipping for coastal traffic diverted to rail traffic which increased the cost of petrol and the motor accessories resulted in the diversion of traffic from road to rail. The difficulty in obtaining necessary industrial products from abroad gave a stimulus to indigenous industries and resulted in a large movements in traffic products of Indian manufacture. On the other hand, the loss of the European continental markets in exporting the certain commodities had an adverse effect on Railway earnings.^{xii}

Rail Road Competition

From 1930 to 1940 Rail Road Competition had made a new orientation in the policy of Railway building. The Co-ordination of Railway was a matter of urgent importance because Railway income fell. Already owing to the competition on existing roads the construction of new line have to be undertaken in co-ordination with road building. By serving the state and its projects of construction The Railway Companies considered the road rail competition. But in respect of Railway facilities the state may occupy a middle position among the states of India.^{xiii} The most serious competition experienced was in connection with the passenger traffic. There was an evidence that competition by buses and lorries were growing in respect to parcels and certain class of goods traffic. Certain measures were taken to counter competition.

1. Improvement in train service

2. Flat rate reduction
3. Cheap return journey tickets between competition points.

In the mean time there was a tight competition and progressive decline in the earnings due to the use of motor cars by private owners. The effect of motor bus competition was felt by the South Indian Railway.^{xiv}

Contrary to Stephenson's prediction, within a few years passengers became the main source of the revenue of the Railroad companies. From the beginning of Railway network in 1856 the company began to amass rich wealth from the variable source from natural products of India and fares continued. Thereafter with the formation of Railway Board in 1905 a streamlined position to finance the Railway sector which came into existence. The Guaranteed interest was unaccountable due to variations in account. As the records are maintained and kept at London no particular reference to a document was found in India. Therefore Indians claimed for accurate amount of interest from the Railway accounts but Auditors never exposed the secrecy and the vagueness behind their calculations. Therefore after 1925 the British Government followed a rigid policy under separation convention. Thereafter the proper accounting of finance and auditing started a new era in the income and expenditure pattern of Railway Administration.

CONCLUSION

Whatever it may be, the British colonialism totally changed India, particularly, Madras Presidency through deforestation by constructing Railways. No Gain without pain. Railways paved the way for the modernization of new Madras Presidency as today we are witnessing our own eyes. With the help of Forest the renewable resources the madras presidency formulated new rail routes and renovated the old rail tracks in connecting the main or important parts of the state. Though deforestation is an evil against the ecology it has brought reformation and revolution in Railway transport. Thus Railways on one hand brought a change in transportation but on the other hand it had devastated the nature. Making Forest as fuel for Railway Engine.

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STRESS COPING STRATEGIES AMONG SOFTWARE PROFESSIONALS IN INDIA

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ABSTRACT

Stress Management is drawing more and more attention nowadays, particularly in the corporate context. There is no such work as a stress-free job. Everyone in their work is exposed to tension, frustration and anxiety as they get through the duties assigned to them. In order to make one's work experience and environment as pleasant as possible, it is better to learn the technique of moderating and modulating the personal stress levels. In fact, stress can also be used as a positive and forceful associate for achieving success and for right level of motivation to drive through any obstacles on the way. This research paper is an analytical, empirical study based on survey of IT professionals in India. The sample was drawn from the various IT hubs in India to make it more representative of the IT professional's population. Through the pre-tested questionnaire used in the survey, data were generated on the respondents' demographics, their self-assessed stress levels and their stress coping strategies. The findings of this study would contribute significantly in better understanding of the stress in IT sector by the academicians and the practitioners. Finally, this study enriches the literature on stress management with respect to the sunshine industry of India.

1. INTRODUCTION

Stress in the 21st century is not something new, not anything unknown. Stress has been experienced since time immemorial, but its toll is higher now than ever before. Today, 75-90 percent of health problems are from stress related problems (Pareek, 1999). 'Stress' is the reaction of an excessive pressure. People are living in a world of rapid and radical changes. These changes affect them considerably and increase their expectations.

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Therefore, people have to tolerate more pressure now than ever before. It is hard to define exactly what stress is as the word ‘stress’ like ‘success’, ‘failure’, or ‘happiness’, means different things to different people. However, stress restricts and acts as a hindrance in the performance of an individual. It is a kind of pressure that people feel in life due to their reaction to situation. Occupational stress has become a common problem throughout the industrial world. Over the years its prevalence has increased, thus affecting the individual's mental health and well-being. Occupational stress poses a threat to physical health. Work related stress in the life of organized workers, consequently, affects the health of organizations. Occupational stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. According to United States National Institute of Occupational Safety and Health, Job stress can be defined as “the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury. Since the early 1960s, researchers have been examining the psychosocial and physical demands of the work environment that trigger stress. Research has identified many organizational factors contributing to increased stress levels: (a) job insecurity; (b) shift work; (c) long work hours; (d) role conflict; (e) physical hazard exposures; and (f) interpersonal conflicts with co-workers or supervisors. Reciprocally, elevated stress levels in an organization are associated with increased turnover, absenteeism, sickness, reduced productivity and low morale.

Although a lot of studies have been conducted on the psychosocial side of the new policy regime in many sectors, there are only few studies, as far as the IT sector is concerned, while the same sector has been drastically influenced by the recession. In this juncture, the present study is undertaken to address specific problems of IT employees related to occupational stress.

2. LITERATURE REVIEW

A stress can be damaging to the individual's psychological and physical health because it often triggers physiological responses that may be harmful these responses to stress tend to be largely automatic. Controlling them depends on the coping responses people make to stressful situation. Thus a person's mental and physical health depends, in part, on his or ability to cope affectively with stress.

The key to understanding stress and coping is individual perceptions of demands and the sufficiency of their coping responses to demands. According to this transactional model, coping can be broadly divided into emotion focused coping and problem focused coping

(Lazarus & Folkman, 1984). Emotion-focused (also called palliative) coping refers to strategies used to moderate distressing emotions. In contrast problem focused coping refers to attempts to alter the demands-coping imbalance.

Coping behavior occurs when a person faces a threatening or dynamic change or problem that defies known or usual way of behavior and might give rise to anxiety, guilt, grief and shame, and again forms the necessity for adaptation.

McGrath (1970) has viewed coping as the covert and overt behavior by which the organism actively prevents, removes or circumvents stress inducing circumstances.

Managing or coping stress means taking charge directly and controlling our responses to stressors, thereby modifying the overall stress. There are many ways to accomplish this goal, but most of them fall under two major headings modifying our environment and altering ourselves in some way, it means (1) Be Assertive (2) Withdraw if necessary (3) Compromise by ways of either conformity or negotiation or substitution. These ways to modify our environment and altering (ourselves) our life style like built Stress tolerance, change pace of life, control distressful thoughts, acquire problem solving skills and seek social support.

Several researchers have identified two major ways of Coping called Problem Focused and Emotion Focused (Lazarus & Folkman, 1984). Both these options can be adaptive as well as maladaptive. Problem-focused coping attempts to solve the problem, i.e. address the source of the stress. Emotion-focused coping aims at reducing or managing the emotional distress caused. Others have added appraisal-focused coping, i.e. coping by controlling the meaning of the stressful situation (Rao, Subbakrishna and Prabhu, 1989). Coping with stress can be a proactive process spanning the stages of detection, prevention and mitigation of stressors (Aspinwall and Taylor, 1997).

To Lazarus and Folkman (1984), People go through three Stages of Coping with a difficult situation. First they engage in primary appraisal of the stressor. Here they decide, given their knowledge of themselves and the situation whether they are potentially threatened or are in jeopardy. Next they engage in secondary appraisal, they assess their resources for dealing with the stressor, as Holroyd and Lazarus note, this assessment is influenced by previous experiences in similar situations, generalized beliefs about the self and the environmental resources. And the third phase is 'Coping'. They take whatever action seems appropriate. This response might involve action or a cognitive adjustment –redefining the situation through self-talk or both.

Further, research suggests that variability in coping is partially influenced by individual's perceptions of the stakes involved in the situations and their perceptions of control. In

addition, coping efforts shift to match changes in perceived demand characteristics (Lazarus & Folkman, 1984).

3. RESEARCH METHODOLOGY

Research in this area is descriptive providing the inventory of feelings of the IT professionals regarding individual assessed stress levels and coping strategies. It has broadly two strands; the occupational stress and the coping strategies adopted by the IT professionals in India.

The present study adapted previously validated scales for examining the self-assessed stress levels and coping strategies. Coping check list (CCL) developed by Rao, Subbakrishna and Prabu (1999) was used in the present study. Table 1 portrays the sub scales and its statement number in a detailed manner. The list of statements was directly used in the questionnaire that can be referred for complete scale.

Table 1 *Coping Strategies Sub Scales*

Coping Strategies	Sub scales	No. of Scale Items
Problem focused	Problem solving	10
Emotion focused	Distraction – Positive	14
	Distraction – Negative	9
	Acceptance/ Redefinition	11
	Religion/Faith	9
	Denial / Blame	11
Problem & Emotion focused	Social Support	6

Courtesy: Rao K, Subbakrishna DK, Prabhu GG (1989)

Research Objectives

1. To measure the level of occupational stress among the IT professionals.
2. To evaluate the coping strategies followed by the IT professionals to reduce their stress levels.

Research Hypotheses

Based on the extensive literature review, the following hypotheses are formulated.

H₀₁: There are no significant relationship between occupational stress and coping strategies among software professionals.

Sampling Decisions

A convenience sample of 250 IT professionals is used in the present study. Software Professionals who have been full time employees with at least 6 months of work experience in the selected IT companies were taken as sample. The questionnaires were distributed

physically, through web links and emails to professionals employed in the selected software companies operating in different city locations in India.

Data Collection

Though the questionnaire was developed with the help of widely used and accepted scales, the pilot study was conducted, for which the standardized questionnaires were supplied to 50 IT professionals and this was tested for reliability using Cronbach alpha analysis. The reliability analysis displayed fair amount of consistency in the scale items used in the questionnaire as portrayed in table 2.

Table 2 Reliability Analysis for Pilot study

Scales and Sub scales - Factors		No. of Items	Cronbach's α Score
Self-Assessed Occupational Stress Level		43	0.874
1.	Self-Analysis	18	0.862
2.	Self-Related Behaviour	8	0.678
3.	Stress & Habitual Changes	5	0.692
4.	Routine Hassles at Work	12	0.734
Coping Strategies		70	0.918
1. Problem Focused	<i>Problem solving</i>	10	0.679
2. Emotion Focused	<i>Distraction – Positive</i>	14	0.723
	<i>Distraction – Negative</i>	9	0.773
	<i>Acceptance/Redefinition</i>	11	0.661
	<i>Religion/Faith</i>	9	0.744
	<i>Denial / Blame</i>	11	0.835
3. Problem & Emotion	<i>Social Support</i>	6	0.630

Source: Pilot Study

4. LIMITATIONS OF THE STUDY

The respondents' opinion may change from time to time and the responses are also subject to variation depending upon the situation and attitude of the respondents at the time of the survey.

Individuals' stress susceptibility varies over time. The environment can also vary its conditions. Since stress is a complex and dynamic process presented in different areas of life, this research focuses only on the individuals self-assessed stress levels and their coping strategies with respect to occupational stress. The impact of stress on work related behaviour of employees, such as absenteeism, loss of judgment, employee conflicts and work place accidents is not analyzed in this study. It is directed for future research.

5. DATA ANALYSIS AND FINDINGS

To examine the demographic profile of the respondents, the present study has considered gender, age, education, marital status and family size. Further, work experience, working shift hours and income were also examined to understand the organizational setting of the respondents. Distribution of respondents based on their demographic characteristics, is shown in the table 3. Analytical aspects of these characteristics are worth noting.

Table 3 *Demographic and Occupational Profile of the Respondents* (N=250)

Characteristics	Groups	Frequency	Percentage
Gender	Male	141	56.4
	Female	109	43.6
Age (in years)	Less than 25	51	20.4
	25 – 30	90	36.0
	31 – 35	79	31.6
	Above 35	30	12.0
Education	Graduation	157	62.8
	Post-graduation	93	37.2
Marital Status	Single	117	46.8
	Married	133	53.2
Spouse Occupation	Unmarried	117	46.8
	Yes	75	30.0
	No	58	23.2
Family Size	< = 2	48	19.2
	3 – 4	108	43.2
	> 4	94	37.6
Annual Income (in lakhs)	Less than 2	50	20.0
	2 – 5	88	35.2
	5 – 10	76	30.4
	Above 10	36	14.4
Work Experience (in years)	Less than 2	50	20.0
	2 – 4	67	26.8
	4 – 7	40	16.0
	Above 7	93	37.2
Working Hours (in hours)	8	41	16.4
	9	131	52.4

	10	78	31.2
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Occupational Stress

The occupational stress of IT professionals were analysed by using their self-assessment on factors such as self-analysis, stress related behavior, stress and habitual changes and routine hassles at work. The scale items were formulated from the self-assessment test originally developed by two American psychologists Holmes and Rahe ('the social readjustment rating scale' Psychosomatic Medicine, 1967). Table 4 displays the summary of means and standard deviations of the scales used to measure the individuals occupational stress level.

Table 4 *Overview of Respondents Occupational Stress (N=250)*

S No	Scale	No of Items	Mean	S.D.
1	Self-Analysis	18	2.92	0.603
2	Stress Related Behaviour	8	2.84	0.699
3	Stress And Habitual Changes	5	2.75	0.687
4	Routine Hassles at Work	12	3.29	0.482
Overall Occupational Stress			2.99	0.468

Coping Strategies

People cope with stressful situations in different ways. In our research we focused on stress coping strategies defined by Rao, Subbakrishna and Prabhu (1989), who divided stress coping strategies into problem-focused and emotion-focused and social support (problem & emotion focused). For the purpose of the study, the coping check list developed by KiranRao, Subbakrishna and Prabhu (1989) was used.

Table 5 *Summary table of Coping Strategies (N=250)*

<i>Coping Strategies</i>			Mean	Std. Dev
<i>Problem Focused - Problem Solving</i>			3.59	0.350
<i>Emotion Focused</i>	(a)	<i>Distraction – Positive</i>	3.47	0.434
	(b)	<i>Distraction – Negative</i>	2.57	0.709
	(c)	<i>Acceptance / Redefinition</i>	3.32	0.452
	(d)	<i>Religious / Faith</i>	2.97	0.741
	(e)	<i>Denial / Blame</i>	2.79	0.651
	<i>Overall Emotion Focused</i>		3.07	0.425
<i>Social Support - Problem & Emotion Focused</i>			3.27	0.559
<i>Overall Coping</i>			3.16	0.378

H₀₁: There are no significant relationship between occupational stress and coping strategies among software professionals

The hypothesis framed for the present examines the relationship between occupational stress levels and the coping strategies adopted by the IT professionals. To test this hypothesis, both Analysis of Variance and Pearson Correlation were employed for detailed investigation on the relationship between occupational stress levels (independent variable) and coping strategies (dependent variable).

Table 6 shows the ANOVA test results conducted between occupational stress of the respondents and their coping strategies. From the table, it can be observed that all the variables are statistical significant at 95 % confidence level ($p < 0.05$). Hence it can be inferred that there is a statistical significant relationship between occupational stress and coping strategies adapted by the respondents. For deeper understanding the relationship between occupational stress and coping strategies, Pearson Correlation was also employed by considering all the variables of the study. Table 6 displays the Correlation test results conducted.

Table 6 Relationship between Occupational Stress and Coping Strategies

		Sum of Squares	df	Mean Square	F	Sig.
Problem Solving	Between Groups	21.480	25	.859	22.082	.000*
	Within Groups	8.716	224	.039		
	Total	30.196	249			
Emotion Focused	Between Groups	38.846	25	1.554	49.659	.000*
	Within Groups	7.009	224	.031		
	Total	45.855	249			
Social Support	Between Groups	65.798	25	2.632	47.916	.000*
	Within Groups	12.304	224	.055		
	Total	78.102	249			
Overall Coping Score	Between Groups	30.934	25	1.237	53.714	.000*
	Within Groups	5.160	224	.023		
	Total	36.094	249			

* Significant at 0.05 level

From the table 7, it can be observed that all the antecedents of occupational stress found significant except the stress related behaviour. The negative distraction found to be insignificant with the occupational stress of the respondents. All other coping strategies found to be correlated with the occupational stress of the respondents.

Table 7 Relationship between Occupational Stress and Coping Strategies

Correlations		Self Analysis	Stress Related Behaviour	Habitual Changes	Routine Hassles at Work	Overall Stress Levels
Problem Solving	Correlation	-0.048	0.059	0.025	.328**	0.089
	Sig. (2-tailed)	0.448	0.356	0.689	0	0.161
Distraction Positive	Correlation	0.002	-0.012	.157*	.547**	.183**
	Sig. (2-tailed)	0.976	0.851	0.013	0	0.004
Distraction Negative	Correlation	-0.087	0.053	-0.111	-0.12	-0.087
	Sig. (2-tailed)	0.171	0.404	0.08	0.057	0.17
Acceptance/Redefinition	Correlation	.202**	-0.03	.177**	.375**	.241**
	Sig. (2-tailed)	0.001	0.635	0.005	0	0
Religious/Faith	Correlation	.229**	0.062	0.07	0.067	.172**
	Sig. (2-tailed)	0	0.327	0.268	0.293	0.006
Denial/Blame	Correlation	.127*	-0.062	0.013	.158*	0.099
	Sig. (2-tailed)	0.045	0.333	0.842	0.012	0.118
Emotion Focused	Correlation	.127*	0.004	0.073	.261**	.157*
	Sig. (2-tailed)	0.046	0.947	0.248	0	0.013
Social Support	Correlation	.124*	-0.11	.203**	.421**	.193**
	Sig. (2-tailed)	0.05	0.082	0.001	0	0.002
Overall Coping Score	Correlation	0.119	-0.004	0.09	.320**	.171**
	Sig. (2-tailed)	0.06	0.954	0.156	0	0.007

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Thus, H_01 is rejected.

The most preferred coping strategy of IT professionals was found to be problem focused, followed by social support. Though, emotion focused was found to be least preferred strategy, positive distraction strategy recorded a high mean more than social support strategy.

6. SUGGESTIONS

Occupational stress is a major problem in Indian IT industry today. Its relationship with various diseases is becoming increasingly obvious, but probably more apparent are the vast socio-economic consequences manifested in absenteeism, employee turnover, and loss of

productivity. Based on the major findings, the study has made recommendations to make the IT employees work in stress-free environment and to achieve work life balance.

Stress Management Programmes

Stress management programmes should be developed in organisations to acquaint the employees with various techniques such as meditation, yoga, relaxation training and managing of lifestyle.

Organizational Climate and Culture

The climate that persists in the organization can be a potential source of stressors. The freedom given to plan the work, weightage given to the views and opinions, participation in decision making, sense of belonging, free and fair communication and sympathetic approach towards personal problems will definitely reduce the stress faced by the professionals.

Working Conditions

Ergonomics plays a very vital role in reducing physical stress among employees in an organization. Therefore, the IT Industry should minimize the chances of employee stress caused by various factors like overuse of computers and also safeguard employees' health from musculoskeletal disorders by using ergonomically designed peripherals at the workplace.

Working Hours and Shifts

The IT Industry has a bane of working night shifts and long working hours as per the requirements of the project or client. But, these things were forced on the employee which creates lot of stress to them because of family responsibilities, especially for women professionals. It is necessary to offer employees various options to balance their work and life.

7. CONCLUSION

Occupational stress is the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the workers. The working conditions such as strict deadlines, long working hours, nightshifts, up gradation of skills, travelling to other countries etc. are creating lot of stress to the employees in IT sector. Now it is the time to realize that the stress levels influence the job satisfaction levels there by on the productivity and efficiency of the employee.

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ORGANIZATIONAL CITIZENSHIP BEHAVIOUR AMONG EMPLOYEES IN A PRIVATE SECTOR HOSPITAL

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ABSTRACT

Organizations could not survive or prosper without their members behaving as good citizens by engaging in all sorts of positive behaviors. Because of the importance of good citizenship for organizations, understanding the nature and sources of OCB has long been a high priority for organizational scholars and remains so. Now-a-days, in times of fast changes and economic difficulties many organizations have to cope with a decrease in revenues. As a consequence competition among similar organizations is growing even harsher. Therefore the researcher has assumed that undertaking this study in a Private Sector Hospital in Tamil Nadu. A sample size of 80 respondents, were distributed to the Staff Nurses, Nursing Assistants, Technicians and Supervisors. A well-designed and pre-tested questionnaire by Podsakoff et al. (1990) was used for data collection to study the Organizational Citizenship Behaviour (OCB) and its dimensions namely, Altruism, Conscientiousness, Sportsmanship, Courtesy and Civic Virtue by using a 5-point Likert-type scale. The results reveal that OCB is differed significantly among the respondents for most of the demographic variables. Based on the findings the researcher has suggested suitable measure to improve the Organizational Citizenship Behavior.

Key Words: Organizational Citizenship Behaviour, Altruism, Conscientiousness, Sportsmanship, Courtesy and Civic Virtue

INTRODUCTION

Organizational citizenship behavior (OCB) is referred as set of discretionary workplace behaviors that exceed one's basic job requirements. They are often described as behaviors that go beyond the call of duty.

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Research of OCB has been extensive since its introduction nearly twenty years back (Bateman and Organ, 1983). The vast majority of OCB research has focused on the effects of OCB on individual and organizational performance. There is consensus in this particular field that OCB addresses silent behaviors for organizational enterprises (Barbuto, Brown, Wilhite, and Wheeler, 2001). Successful organizations have employees who go beyond their formal job responsibilities and freely give of their time and energy to succeed at the assigned job. Such altruism is neither prescribed nor required; yet it contributes to the smooth functioning of the organization.

Organizations could not survive or prosper without their members behaving as good citizens by engaging in all sorts of positive behaviors. Because of the importance of good citizenship for organizations, understanding the nature and sources of OCB has long been a high priority for organizational scholars (Organ, 1988) and remains so. Organizational citizenship behavior has been defined in the literature as a multi Jahangir, *et al* dimensional concept that includes all positive organizationally relevant behaviors of organizational members including traditional in role behaviors, organizationally pertinent extra-role behaviors, and political behaviors, such as full and responsible organizational participation (Van Dyne, Graham, and Dienesch, 1994). Organ (1988) argued that OCB is held to be vital to the survival of an organization. Organ further elaborated that organizational citizenship behavior can maximize the efficiency and productivity of both the employee and the organization that ultimately contribute to the effective functioning of an organization.

THE CONCEPT OF OCB

Definitions of OCB

The willingness of participants to exert effort beyond the formal obligations dictated by their positions has long been recognized as an essential component of effective organizational performance. For example, more than a half century ago, Barnard (1938) stated that the willingness of individuals to contribute cooperative efforts to the organization was indispensable to effective attainment of organizational goals.

Barnard elaborated that efforts must be exerted not only to perform the functions that contribute to the goals of the organization but also to maintain the organization itself. Individuals differ in their willingness to contribute to the “cooperative

system”, and this individual difference in behavior cannot be explained by individual differences in ability. Maintaining the organization could be interpreted to up-lift the organization by exercising discretionary ownership. Regarding the cooperative system, Katz and Kahn’s (1966) extended this argument further. In any organization, they claimed, the system would break down were it not for the “countless acts of cooperation” exhibited by the employees. They further noted that the incentives that motivate such spontaneous, informal contributions are different from those that motivate task proficiency. These insights prompted much of the subsequent research in the area.

According to Organ (1988) in OCB an individual’s behavior is discretionary. This behavior is not directly or explicitly recognized by the formal reward system and it in the aggregate that promotes the effective functioning of the organization. Katz’s (1964) paid heed to the notion of employees’ extra-role behaviors. Katz noted that employees willingly contribute extra efforts for the attainment of the organizational outcomes. Organ relied on both the notions of Barnard (1938) and Katz (1964) to develop his OCB construct.

The employees do not or cannot expect any kind of formal rewards for these discretionary behaviors. However, as Organ (1997) has noted, the supervisors do regularly take into account and reward OCB exhibited by the subordinates both directly and indirectly (e.g. preferential treatment, performance ratings, promotions, etc). Another important assertion, especially in Organ’s (1988) founding work on OCB, is that these behaviors are often internally motivated, arising from within and sustained by an individual’s intrinsic need for a sense of achievement, competence, belonging or affiliation.

Organ (1988) argued that OCB is distinct from related constructs (such as “organizational commitment”) developed by organizational researchers. While OCB may be empirically related to organizational commitment (Cohen and Vigoda, 2000), it is important to emphasize that OCB refers to a particular class of employee behaviors, while constructs such as organizational commitment is essentially attitude-based (as originally operationalized in the organizational commitment questionnaire of Mowday *et al.*, 1979), which is typically measured by seeking employees’ responses to such scale item statements as “I find that my values and the organization’s are very similar”. The unique contribution of Organ was to identify a class of employee work behaviors (organizational citizenship behaviors) whose relationship with job satisfaction, among other variables, might be meaningfully examined in the search for a practically significant workplace behaviors related to employee job attitudes.

Dimensions of OCB

McClelland (1961) argued that OCB can be best understood when OCB is viewed as motive based behaviors. McClelland's work suggested that all people have some degree of achievement, affiliation, and power motives. The achievement motive pushes people to perform in terms of a standard of excellence, seeking the accomplishment of a task, challenge, or competition. The affiliation motive pushes people toward establishing, maintaining, and restoring relationships with others. The power motive pushes people toward status and situations in which they can control the work or actions of others.

Organizational citizenship behavior was described by Organ and his colleagues (Smith, Organ, and Near, 1983) as having two basic dimensions—altruism and generalized compliance. In attempting to further define organizational citizenship behavior, Organ (1988) highlights five specific categories of discretionary behavior and explains how each helps to improve efficiency in the organization.

- Altruism (e.g., helping new colleagues and freely giving time to others) is typically directed toward other individuals but contributes to group efficiency by enhancing individuals' performance.
- Conscientiousness (e.g., efficient use of time and going beyond minimum expectations) enhances the efficiency of both an individual and the group.
- Sportsmanship (e.g., avoids complaining and whining) improves the amount of time spent on constructive endeavors in the organization.
- Courtesy (e.g., advance notices, reminders, and communicating appropriate information) helps prevent problems and facilitates constructive use of time.
- Civic Virtue (e.g., serving on committees and voluntarily attending functions) promotes the interests of the organization.

STATEMENT OF THE PROBLEM

Now-a-days, in times of fast changes and economic difficulties many organizations have to cope with a decrease in revenues. As a consequence competition among similar organizations is growing even harsher. Would not it be desirable to find a competitive advantage that contributes to an increase in performance without requiring any financial investment? Finding a way to making employees engaging in OCB will represent

such a competitive advantage. The researcher is working in the study organization as Medical Superintendent and who seems very obvious that employees should be motivated on developing from OCB. Therefore the researcher has assumed that undertaking this study in the National Pharma Hospital and Research Institute, Thanjavur.

OBJECTIVES OF THE STUDY

In order to point out more precisely the researcher has devised the following objectives:

1. To analyze the significant difference among the employees in their OCB.
2. To know the relationship between demographic factors of the employees and their OCB.

REVIEW OF LITERATURE

Jaleh et al. (2014) drew upon the social exchange theory and empowerment theory, the purpose of this paper is to investigate the effect of perceived person-environment fit on organisational citizenship behaviour (OCB). Furthermore, this study assesses the roles of organisational commitment and psychological empowerment (PE) in this relationship. Respondents of this study were employees of the Iran Northeast Gas Transfer Company. Data were collected through conducting a survey on 500 employees, of which 412 questionnaires were used for further analysis. Confirmatory factor analysis, structural equation modelling, Baron and Kenny's (1986) procedure for examining mediator effect, and finally Zhao and Cavusgil's (2006) technique of evaluating moderator effect were utilised for the analyses. Results indicated that organisational commitment acts as a mediator between person-job (P-J) fit and person-organisation (P-O) fit and OCB. PE acts as a moderator between organisational commitment and OCB.

Millissa et al. (2014) investigated the agreement between supervisors and subordinates concerning the motives of organizational citizenship behaviors (OCB) and how the supervisors' attributions affect their OCB ratings. With the permission of seven large organizations in Macau, the authors conducted a survey of 500 employee-supervisor-co-worker triads. The final sample stood at 176 such triads with three hypotheses tested. First, supervisors are more accurate when judging altruistic motives of subordinates' OCB than with egoistic motives. Second, supervisor attribution of subordinates' altruistic motives

positively affects the supervisors' OCB ratings. Third, employees who are motivated by altruistic motives perform more OCB actions those egoistically motivated.

Sergey et al. (2014) described the concepts of two new approaches offered by IPMA through its internationally widespread member associations: IPMA Delta for assessing and developing project management maturity and the IPMA Organisational Competence Baseline (OCB), acting as reference model for IPMA Delta. In addition to this description, a case study reveals insights in the usage of IPMA Delta and the benefits realized through such a holistic assessment of project management maturity. The study takes the form of a conceptual paper and a case study. IPMA Delta is a holistic assessment of the organisational competence in managing projects. Three modules are used to assess the competence of selected individuals, the application of project management in selected projects and the organisation's approach of managing projects. Through the assessment, an organisation gets insights in regard to the current maturity and the Delta to a desired target state. Recommendations drive the continuous development of organisational competences in managing projects, which is shown in the case of the Chernobyl Nuclear Power Plant. This case study also reveals insights in the benefits realized through such a holistic maturity assessment.

Sumi Jha (2014) undertook a study to understand various antecedents of organizational citizenship behavior (OCB). Transformational leadership and psychological empowerment were two independent variables chosen for the study. Standard questionnaires were used to collect data. The sample of 319 employees of different five-star hotels formed the source of data. Frontline employees having two to three subordinates and were from hotels which were in operation at least since last two years, took part in the study. The effect of transformational leadership on OCB has been found to be significant and positive. The moderating effect of psychological empowerment on OCB was also found significant.

Sean and Joel (2013) have defined on Organizational citizenship behaviors (OCBs) as non-required workplace behaviors that have potential positive organizational impact. This study examined gender roles and differences in employee evaluations based on OCB participation. College students (N = 160) rated male and female managers, who did or did not participate in OCBs, on evaluation of behaviors and possessed gendered traits (agentic and communal). Additionally, participants rated the gendered nature of OCBs. OCB participation had a direct effect on managerial ratings and OCBs were perceived to be more feminine than masculine. Gender did not predict differences in ratings; however, women were seen as more likely to participate in OCBs compared to men. Additionally, the gender

roles associated with OCBs were measured and OCBs were perceived to be mostly feminine in nature.

Hannes and Nerina (2013) have examined examine followers' learning goal orientation as a moderator of relationships among transformational leadership, organizational citizenship behavior (OCB) and sales productivity. Data came from 61 food and beverage attendants of a casino, and were analyzed using regression analyses. Transformational leadership was positively related to both OCB and sales productivity. Learning goal orientation moderated the relationship between transformational leadership and OCB, such that transformational leadership was more strongly related to OCB among followers with a low learning goal orientation than among followers with a high learning goal orientation. Limitations of the study include the small sample size and cross-sectional research design.

RESEARCH METHODOLOGY

The researcher has adopted the Descriptive study method in this research. The population of the study is 90 employees, who are working in different departments. The population consists of different categories of employees namely, Nurses, Nursing Assistants, Technical workers, Accountants and Non-technical workers. The sample size of the study is 80 respondents, the data collected from 90 employees such as, Nurses, Nursing Assistants, Technical workers, Accountants and Non-technical workers.

Measurement of Variables

A well-designed and pre-tested questionnaire by Podsakoff *et al.* (1990) was used for data collection. Validity and Reliability are obtained in the study, which are satisfied the conditions of the research study. The questionnaire consists of two sections: The first section deals with the personal information of the respondents; and the second section is concerned with the Organizational Citizenship Behaviour (OCB). The different dimensions of the OCB namely, Altruism, Conscientiousness, Sportsmanship, Courtesy and Civic Virtue are studied. The researcher has obtained responses by using a 5-point Likert-type scale where, 1-Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree and 5 – Strongly Agree and the items wording are modified as self-reporting of the respondents.

MAJOR FINDINGS

Results of the mean difference among the demographic variables on dimensions of Organizational Citizenship Behaviour are presented in Table – 1.

Demographic Factors of the Respondents and Organizational Citizenship Behaviour

- There are 0.01 level significant differences for the factors namely, Sportsmanship ($t = 2.425$), Civic Virtue ($t = 6.437$) and for the OCB ($t = 5.159$) and the Altruism, Conscientiousness, Courtesy are not differed significantly.
- The factors, Altruism, Civic Virtue and Overall OCB are differed significantly at the 0.01 level. The other factors namely, Conscientiousness, Sportsmanship and Courtesy are not differed significantly among the different age group of the respondents.
- Civic Virtue is differed significantly at the 0.01 level, Conscientiousness and the overall OCB are differed significantly at the 0.05 level between married and unmarried respondents. The other dimensions namely, Altruism, Sportsmanship and Courtesy are not differed significantly between married and unmarried respondents.
- According to their educational qualification, Conscientiousness, Sportsmanship and Courtesy are different significantly at the 0.01 level.
- Designation-wise, Staff Nurses are better than others. There is significant difference among the respondents on OCB at the 0.01 level.
- 'Above 10 years' experienced respondents have more belongingness and loyalty. In the overall OCB, there is a significant difference at the 0.01 level.

Correlation between Demographic Factors and Organizational Citizenship Behaviour

Table –2 shows the results of relationship between demographic variables and dimensions of Organizational Citizenship Behaviour. The demographic variables such as, gender, age and years of experience is found to be correlated at the 0.01 level on OCB. While considering the Altruism, years of experience is correlated at the 0.01 level, for Conscientiousness, gender, educational qualification and designation are correlated significantly at the 0.01 level. For Sportsmanship, educational qualification and designation are correlated at the 0.01 level, and gender is correlated at the 0.05 level. For Courtesy, educational qualification is correlated at the 0.01 level significant and for Civic Virtue gender, age and years of experience are correlated significantly at the 0.01 level. In this study, all the demographic factors namely, gender, age, marital status, educational

qualification, designation and years of experience are correlated significantly with the OCB and its dimensions.

Table – 1. Results of the mean difference among the demographic variables on dimensions of Organizational Citizenship Behaviour

Dimension s of OCB	Gender		Age		Marital Status		Education al Qualificat ion		Designati on		Years of Experience	
	‘t’	‘p’	‘F’	‘p’	‘t’	‘p’	‘F’	‘p’	‘F’	‘p’	‘t’	‘p’
Altruism	0.3 54	0.72	5.6 21	0.00 5**	0.0 62	0.95 0	0.04 5	0.95 6	3.78 2	0.04 *	6.46 8	0.00 2**
Conscienti ousness	2.7 62	0.05 *	2.0 83	0.13 0	1.9 71	0.05 2*	24.5 51	0.00 **	17.5 11	0.00 **	2.82 7	0.05 4*
Sportsman ship	2.4 25	0.01 **	0.0 15	0.98 5	0.5 33	0.59 6	39.4 19	0.00 **	31.2 97	0.00 **	1.20 1	0.30 5
Courtesy	1.0 72	0.28	2.1 39	0.12 3	0.1 44	0.88 6	24.3 45	0.00 **	35.7 29	0.00 **	0.12 8	0.88 0
Civic Virtue	6.4 37	0.00 **	6.7 44	0.00 2**	2.7 66	0.00 7**	1.17 0	0.31 5	20.5 84	0.00 **	15.6 14	0.00 **
OCB	5.1 59	0.00 **	6.2 87	0.00 3**	1.8 75	0.05 4*	1.92 9	0.15 1	13.6 45	0.00 **	8.18 6	0.00 1**

** - Significant difference at the 0.01 level; * - Significant difference at the 0.05 level

Table – 2. Results of Correlation co-efficients between Demographic Variables and Organizational Citizenship Behaviour

Variables	1	2	3	4	5	6	7	8	9	10	11	12
Gender	1											
Age	0.369*	1										

Marital Status	0.339* *	0.533* *	1									
Educational Qualification	0.181	0.099	0.111	1								
Designation	0.199* *	0.073	0.030	0.637* *	1							
Years Experience	0.507* *	0.765* *	0.534* *	0.365* *	0.075	1						
Altruism	0.036	0.159	0.006	0.028	0.186	0.306* *	1					
Conscientiousness	0.269* *	0.127	0.195	0.492* *	0.582* *	0.067	0.191	1				
Sportsmanship	0.238* *	0.012	0.054	0.576* *	0.361* *	0.141	0.104	0.180	1			
Courtesy	0.108	0.176	0.015	0.494* *	0.191	0.030	0.175	0.292* *	0.519* *	1		
Civic Virtue	0.545* *	0.324* *	0.269* *	0.140	0.150	0.439* *	0.043	0.257* *	0.099	0.283* *	1	
OCB	0.462* *	0.319* *	0.186	0.096	0.057	0.380* *	0.571* *	0.381* *	0.164	0.512* *	0.616* *	1

SUGGESTIONS

Based on the research findings, the researcher has suggested the following suggestion to the betterment of the organization. These are as follow:

- The employees should be more careful in their work, dependable, punctual, willing to take on new duties, adhering to the corporation rules etc.
- The employees should contribute positively to team spirit; tolerate inconvenience, attitude towards the work even when circumstances are difficult.

- The management should avoid causing unnecessary inconvenience to employees and to internal or external customers, and should make it easier for the employees to get things done, gives them early warnings of potential problems etc.
- In the management level should keep in touch with relevant developments and inform others about them, should play a constructive role in improving working arrangements and in helping to make changes effective; freely share knowledge, skills and expertise with others.
- The employees should have more spirit to care about colleagues and should be helpful to them if they have problems with their work, to solve the problems of internal and external customers.
- Overall, the employees should use the company time, resources and benefits in a disciplined, economical, and honest manner that will demonstrate high integrity and trustworthiness in utilizing / protecting organizational resources.

CONCLUSION

Organizations could not survive or prosper without their members behaving as good citizens by engaging in all sorts of positive behaviors. Because of the importance of good citizenship for organizations, understanding the nature and sources of OCB has long been a high priority for organizational scholars and remains so. Now-a-days, in times of fast changes and economic difficulties many organizations have to cope with a decrease in revenues. As a consequence competition among similar organizations is growing even harsher. The results reveal that OCB is differed significantly among the respondents for majority of the demographic factors. Based on the findings the researcher has suggested suitable measure to improve the Organizational Citizenship Behaviour.

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FACTORS AFFECTING ON JOB PERFORMANCEEMPLOYEES IN APPAREL INDUSTRY SPECIAL REFERENCE IN WESTERN PROVINCE – SRI LANKA

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Introduction

Job performance has been defined as the “overall expected value from employees’ behaviors carried out over the course of a set period of time” (Motowidlo, Borman, & Schmidt, 1997). Job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job experiences” (Buchbinder et al, 2001). It is in fact one’s attitude towards the job, and this attitude can be greatly influenced by human resource practices in the firm.

K. H. H. Kottawatta (2007), in his study Impact of Attitudinal Factors on Job Performance of Executives and Non-Executive Employees in Apparel Industry in Sri Lanka, job satisfaction, organizational commitment, and job involvement were positively and strongly correlated with job performance of executive employees while job satisfaction was positively and strongly correlated with job performance of non-executive employees in this sector. Employee job performance is considered as a critical success factor in organizations. The aim of this study is to determine the most important factors that affect the job satisfaction of employees in the Sri Lankan Garment industry in order to improve job performance. There are five factors identified, Job satisfaction act as the mediating factor.

Problem statement

Many industries have been identified as employees with low productivity, less job satisfaction, high labor turnover and so on. It was discussed and identified the apparel industry critically suffers from high labor turnover due to lack of job satisfaction. As a result, low productivity, poor job performance, poor working relationships and high labor turnover have been reported.

But, unfortunately, it is observed that there is not enough research made in Sri Lankan Garment Industry on the matter. Since a considerable amount of employees working in the industry and the industry contribute to bring foreign money in to the country, this issue needed to be addressed in order to improve product quality and the quality of employees’ lives.

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Research question

What are the factors affecting on Job performance of employees in Apparel industry in Sri Lanka ?

OBJECTIVES OF THE STUDY

- To identify significant factors influences on employee job performance
- To analyze the relationship between influencing factors and job satisfaction of employees
- To analyze the relationship between job satisfaction and job performance of employees
- To evaluate overall job performance level of the employees

SIGNIFICANCE OF THE STUDY

Since there are researches rarely available in this field, the research finding could enable the Apparel industry to take suitable actions to identify the significant factors affecting on the job performance of employees and which factors is the most significant factor, moreover it will enable to bridge the gaps between those factors and job performance if there is any. Finding of this study will also form further research questions for further investigation.

LITERATURE REVIEW

According to Kelegama and Epaarachci (2003), some factories lack basic facilities such as canteens, sanitary facilities, etc., and in many cases, regular breaks for using these facilities were not provided. Sexual harassment for female workers, longer working hours, no extra payment for additional hours, continuous working in both shifts, and requirements to work night shifts are the factors of poor human resources practices.

K. H. H. Kottawatta (2007), in his study Impact of Attitudinal Factors on Job Performance of Executives and Non-Executive Employees in Apparel Industry in Sri Lanka , empirically investigated three attitudinal variables, which could influence on the job performance of the executive and nonexecutive employees in the apparel industry

AnandaJayawickrama , Shandre M. Thangavelu , (2011), The position of Sri Lanka in the value chain of the global textiles and clothing industry is identified in this paper.

The paper also examines how economic policies and trading arrangements affect the competitiveness of Sri Lanka in the global supply chain network of the textile and clothing industry.

RizwanQaiser Danish and Ali Usman (2010) Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical Study from Pakistan). The statistical analysis showed that different dimensions of work motivation and satisfaction are significantly correlated and reward and recognition have great impact on motivation of the employees

Moorthy and Mrs. V. Punitha (2013) Perception of Employees on Work Environment in Tirupur Garment Industry, emphasize, the working environment is the quality of the employee's workplace environment that most impacts on their level of motivation and subsequent performance. The prevalence of the pleasant work environment motivates the employees to stay in the organization for a long period and significantly contributes for their improved performance and productive efficiency

Research Design

SURVEY METHODOLOGY

A structured questionnaire distributed amongst the employees in 10 factories situated in the Western province was selected as the method of data collection in this study. This study was purely based on primary data. The present study involved formulation and testing of hypotheses with a view to establish the correlations between dependent variable and the independent variables. The study needed more reliable and original data to test hypotheses.

COMPOSITION OF THE SAMPLE

The survey was carried out among the sample of 350 employees in the apparel industry in the Western province of Sri Lanka.

Total number of employees 227,214 (registered under .

Total	Western	Uva	Southern	Eastern	Northern	North Central	Central	Sabaragamuwa	North Western
227,214	134,372	3,200	24,076	6,618	Information is not available in the BOI	7,574	11,641	15,253	24,480

Total number of garment factories 305

Total	Wester n	Uv a	Southe rn	Easte rn	Norther n	North Centr al	Centr al	Sabarag a- muwa	North Weste rn
305	156	7	37	10	2	14	22	21	36

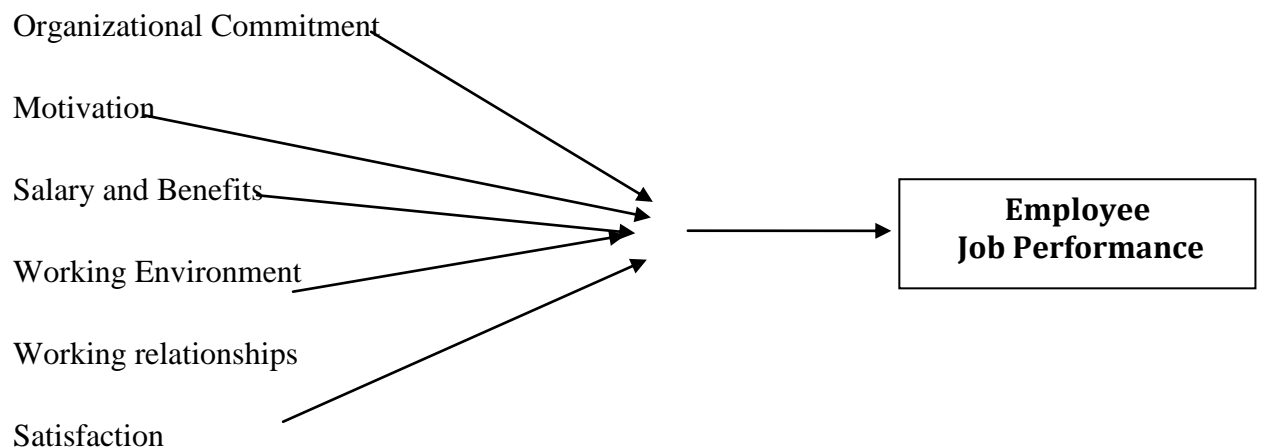
Source: BOI database

Reliability test Statistics

Main Factor /Variables	Cronbach's Alpha	No of Item / Sub factors
Organizational Commitment	0.925	8
Motivation	0.946	16
Salary and Benefits	0.872	9
Working Environment/Working condition	0.867	8
Working relationships	0.932	8
Job Satisfaction	0.878	8
Employee Job Performance	0.842	8

So these factors are reliable to measure the main dependent and independent variables

Research model



Develop by researcher

Hypothesis

H1: There is a positive relationship between organizational commitment and Job satisfaction of employees in the apparel industry.

H2: There is a positive relationship between Motivation and job performance

H 3: There is a positive relationship between Wages and Benefits and Job satisfaction of employees

H4: The relationship between working environment/condition and employee job performance of employees

H5: There is a positive relationship between working relationships and employee job satisfaction of employees

H6 There is a positive relationship between job satisfaction and job performance of employees

DATA ANALYSIS

Table 1.1 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.(P)
	B	Std. Error	Beta		
1 (Constant)	-.128	.174		-.734	.464
ORG CMT	.097	.058	.101	1.662	.098
MOT	.424	.086	.388	4.932	.000
SAL/BEN	.005	.061	.005	.082	.935
WORK ENV	.070	.066	.061	1.074	.284
WORK REL	.389	.067	.379	5.772	.000

Source : Survey data

Based on the standardized Beta coefficients, the effect of SAL/BEN is 0.005, which is about 0.0117 times ($0.005/0.424 \sim 0.0117$) less than the effect of MOT (0.005 in magnitude). Based on the standardized Beta coefficients, the effect of WORK ENV is 0.070, which is about 14 times ($0.070/0.005 \sim 14$) higher than the effect of SAL/BEN (0.070 in magnitude). Based on the standardized Beta coefficients, the effect of WORK REL is 0.389, which is about 5.557 times ($0.389/0.070 \sim 5.557$) higher than the effect of work (0.389 in magnitude).

The **p-values** for Organizational Commitment, Salary/Benefits and Working Environment are respectively 0.098, 0.935 and 0.284 which are more than 0.01. Thus, Organizational Commitment, Salary/Benefits and Working Environment are not a significant predictor of job satisfaction. The p-value for Motivation and Working Relationships of Non executive employees are less than 0.001 (0.001). Hence, Motivation and Working Relationships is significant predictors of Job Satisfaction

Organizational Commitment

Thus, for every unit increase in organizational commitment, job satisfaction is expected to increase by 0.097, with the assumption of other independence variable are remain same.

Motivation

Similarly, for every unit increase in Motivation, job satisfaction is expected to increase by 0.424, with the assumption of other independence variable are remain same.

Wages and Benefits

every unit increase in Sal/Ben, job satisfaction is expected to increase by 0.005, with the assumption of other independence variable are remain same.

Working environment/condition

Similarly, for every unit increase in Working Environment, job satisfaction is expected to increase by 0.070, with the assumption of other independence variable are remain same.

Working relationships

every unit increase in Working Relationships, job satisfaction is expected to increase by 0.389, with the assumption of other independence variable are remain same.

Based on the standardized Beta coefficients, the effect of Motivation is 0.424, which is about 4.371 times ($0.424/0.097 \sim 4.371$) higher than the effect of Organization (0.424 in magnitude).

Table 1.2 Results of measurements of relationships between independent variables and Job satisfaction/Job Performance

Variables	Correlation (<i>r</i>)		P value	
	Executive Employees	Non Executive employees	Executive Employees	Non Executive employees
Organizational Commitment and Job satisfaction	.691	.724	.215	.098
Motivation and Job satisfaction	.805	.825	.000	.000
Salary/Benefits and Job satisfaction	.634	.683	.320	.935
Working environment/condition and Job satisfaction	.670	.685	.242	.284
Working relationships and Job satisfaction	.786	.814	.000	.000
Job satisfaction and Job performance	.815**	.821**	.000	.000

Survey data

A multiple linear regression model is fitted to relate the overall job satisfaction with selected factors. By this fitted model 74.7% of the variation in the overall job satisfaction is explained by the said factors. According to the regression analysis of this study, the overall job satisfaction of executive and non- executive employees in the Apparel sector in Western Province of Sri Lanka (Y) is derived as, Thus, for every unit increase in Organizational commitment, Job satisfaction is expected to increase by 0.067, with the assumption of other independent variables remains same. Similarly, for every unit increase in Motivation, Job satisfaction is expected to increase by 0.452, with the assumption of other independent variables remains same. Similarly, for every unit increase in Sal/Benefits, Job satisfaction is expected to increase by 0.049, with the assumption of other independent variables remains same. Similarly, for every unit increase in Working Environment, Job satisfaction is expected to increase by 0.070, with the assumption of other independent variables remains

same. Similarly, for every unit increase in Working Relationships, Job satisfaction is expected to increase by 0.369, with the assumption of other independent variables remains same. This implies that overall job satisfaction of executive employees is positively correlated with Organizational Commitment, Motivation, Salary and Benefits, Working Environment/condition, Working Relationships. Hence the hypothesis 1, 2, 3, 4, and 5 is accepted and therefore all above factors have a significant positive influence on job satisfaction.

Thus, for every unit increase in organizational commitment, job satisfaction is expected to increase by 0.097, with the assumption of other independent variables remain same.

Similarly, for every unit increase in Motivation, job satisfaction is expected to increase by 0.424, with the assumption of other independent variables remain same. Similarly, for every unit increase in Sal/Ben, job satisfaction is expected to increase by 0.005, with the assumption of other independent variables remain same. Similarly, for every unit increase in Working Environment, job satisfaction is expected to increase by 0.070, with the assumption of other independent variables remain same. Similarly, for every unit increase in Working Relationships, job satisfaction is expected to increase by 0.389, with the assumption of other independent variables remain same.

This implies that overall job satisfaction of non executive employees is positively correlated with Organizational Commitment, Motivation, Salary and Benefits, Working Environment/condition, Working Relationships. Hence the hypothesis 1, 2, 3, 4, and 5 is accepted and therefore all above factors have a significant positive influence on job satisfaction.

The r values between Organizational Commitment and Job satisfaction is 0.691, Motivation and Job satisfaction is 0.805, Salary/Benefit and job satisfaction is 0.634, Working Environment and job satisfaction is 0.670, Working Relationships and job satisfaction is 0.786 (all five >0.3). Thus, job satisfaction is positively correlated with Organizational Commitment, Motivation, Salary/Benefits, Working Environment and Working Relationships.

The r value between Organizational Commitment and Motivation is 0.797, Organizational Commitment and Wages is 0.633, Organizational Commitment and Working Environment is 0.637, and Organizational Commitment and Working Relationships is 0.683, Motivation and Sal/Ben is 0.697, motivation and working Environment is 0.707, motivation and Working Relationship is 0.795, Sal/Ben and working Environment is 0.674, Sal/Ben and Working Relationship is 0.649, working Environment and working Relationship is 0.728 ,

Accordingly all of them are less than 0.85. Similarly, correlation between the independent variables and Job Satisfaction of Non executive employees of apparel sector in Western province as follows,

The r values between Organizational Commitment and Job satisfaction is 0.724, Motivation and Job satisfaction is 0.825, Salary/Benefit and job satisfaction is 0.683, Working Environment and job satisfaction is 0.685, Working Relationships and job satisfaction is 0.814 (all five >0.3). Thus, job satisfaction of non executive employees is positively correlated with Organizational Commitment, Motivation, Salary/Benefits, Working Environment and Working Relationships.

The r value between organizational commitment and motivation is 0.810, organizational commitment and Salary /Benefit is 0.633, organizational commitment and working environment is 0.629, and organizational commitment and working relationship is 0.704, motivation and Sal/Ben is 0.768, motivation and working environment is 0.713, motivation and working relationship is 0.811, Salary /Benefit and working environment is 0.705, Salary/Benefit and working relationship is 0.712, working environment and working relationship is 0.738, all of them are less than 0.85.

RECOMMENDATIONS

Results of this study show that Organizational Commitment, Motivation, Salary and benefits Working Environment/Working condition and Working Relationships are positively affect job satisfaction and Job satisfaction is significantly affects job performance According to Hamdan (2011) highly satisfied employees are motivated to work in the organization, do their work at optimum level and perform better than less satisfied workers. According to Organ (1977) and Petty, *et al.*(1984) job performance considered as, a satisfied worker who is also a productive employee.

In order to make employees more satisfied which are Organizational commitment, Working environment/condition and Salary and Benefits. Simultaneously researcher identified two factors which are Motivation and Working relationships significant in deciding the level of job satisfaction of employees. It shows they are more concerning on the inner satisfaction more than money and other benefits.,

Employees would like to be a part of the organization. Hence, organizations need to get the participation of employees in organizational decision making.

They need to find reasons for employee turnover and take strategic decisions in reducing employee turnover. It is recommended to identify the deficiencies of performance of employees in order to train them and make them more productive employees. The employees will also identify themselves competitive and improve their morale.

Performance based incentives may also be introduced to motivate people to work harder and earn more reward and benefits. In offering the reward, the cost of living should be taken into account as this will protect employee welfare, increase their purchasing power, and decrease their burdens in fulfilling family and personal needs. This in return will increase their satisfaction and commitment level to the organization.

It is recommended to maintain a hazard free conducive working environment as much as possible to prevent accidents. Many sections in the apparel manufacturing factory are hazardous. Hence supervisors need to advice the workers to wear safety equipment like eye guards, masks etc.

It is recommended that, management of the organizations in the apparel industry should realize the importance of job satisfaction and institute policies and other measures to improve the areas which employees are not satisfied with.

Further, it is recommended that continuous evaluations and monitoring of job satisfaction is important for any firm. Involving staff in a cooperative, team approach will allow for consideration of ways to improve aspects relating to job satisfaction. Improving the aspirations of the staff is likely to increase job satisfaction and consequently have a positive effect on individual, the organization and the citizens of the country. Hence it proves that all evaluated job related factors have a positive correlation with job satisfaction. Satisfied employees always spend extra hours working for the organization themselves without persuasion.

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“ROLE OF EMOTIONAL INTELLIGENCE ON ENTREPRENEURIAL SUCCESS OF WOMEN”

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ABSTRACT:

Emotional intelligence is a state of mind to take decisions spontaneously, by imagining the consequences of business and its success. No businessmen, takes right decisions at all points of time, but the experience and learning values can help to take the best possible decision to set right the situation. The same is applicable to women too in business. But the environment and other variables role in determining the emotional intelligence level of women entrepreneurs at different points of time will vary and its influence on business success and goal achievement is high. With this view the current work is undertaken among the selected women entrepreneurs in Chennai. For the purpose of study, the researcher approached 284 women entrepreneurs in Chennai city, selected from the women entrepreneurs' forum of NEN and TiE and a structured questionnaire is distributed to know the responses in a five point scale. While meeting the women entrepreneurs, a convenient sampling technique is adopted due to time constraints and co-operative level of the respondents. The primary objective of the study is to assess the overall impact on emotional intelligence and entrepreneurial success on the goal achievement of women in business in the sample area. The study results reveals that, the goal achievement of women entrepreneurs will decline 0.322, , 0.183 and 0.365 unit for every unit increase in overall emotional intelligence, entrepreneurial success of women and goal achievement respectively.

Keywords: Success Factors-Family support-Social environment-Financial needs-risk taking capacity.

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Introduction

Emotional intelligence is a flexible set of skills that can be acquired and improved with practice. Although some people are naturally more emotionally intelligent than others, one can develop high emotional intelligence even if one isn't born with it. A research study, tested emotional intelligence alongside 33 other important workplace skills, and found that emotional intelligence is the strongest predictor of performance, explaining a full 58% of success in all types of jobs. Of all the people studied at work, it is found that 90% of top performers are also high in emotional intelligence. On the flip side, just 20% of bottom performers are high in emotional intelligence. You can be a top performer without emotional intelligence, but the chances are slim. Naturally, people with a high degree of emotional intelligence make more money—an average of \$29,000 more per year than people with a low degree of emotional intelligence. The link between emotional intelligence and earnings is so direct that every point increase in emotional intelligence adds \$1,300 to an annual salary. It is also similar in business and entrepreneurship. Hence, the current study is focused to measure the role of emotional intelligence in the entrepreneurial success and goal achievement of women in business.

Research Methodology

For the purpose of study, the researcher approached 284 women entrepreneurs in Chennai city, selected from the women entrepreneurs' forum of NEN and TiE and a structured questionnaire is distributed to know the responses in a five point scale. While meeting the women entrepreneurs, a convenient sampling technique is adopted due to time constraints and co-operative level of the respondents. Most of the women in business are not regular to business and finding family as chief constraint to business and movement. Business requires lot of time and travel along with innovative changes in business model. The primary objective of the study is to assess the overall impact on emotional intelligence and entrepreneurial success on the goal achievement of women in business in the sample area.

Data Analysis and Discussion:

The data analysis pertaining to the level of emotional intelligence of women entrepreneurs and the level of success and degree of goal achievement is liked by using multiple regression and the results are discussed in the following lines. The analysis is carried out by using the SPSS 23.0 version and the statistical significance is observed at 1% level and 5 % level.

Null Hypothesis: H₁: Overall emotional intelligence does not influence entrepreneurial success of women

Table-1: Impacts of overall emotional intelligence, on entrepreneurial success of women

Variable	Unstandardized Coefficients		Adjusted R-square	t value	P value
	Beta	S. E			
Constant	0.121	0.242	0.307	0.501	0.617
Overall emotional intelligence	0.915	0.063		14.501	<0.001**

Note: ** Denotes significant at 1% level.

Table 1 presents the association between the predictors as overall emotional intelligence, and variable entrepreneurial success of women using linear regression analysis. The level of significances ($p < 0.01$) reveal that the levels of overall emotional intelligence strongly influence entrepreneurial success of women level. Also, the estimation of overall emotional intelligence ($\beta = 0.915$) are positive which explicit entrepreneurial success of women will increase 0.915 unit for every unit increase in overall emotional intelligence. The adjusted R-square (0.307) states 31 percent of variations in entrepreneurial success of women depend on overall emotional intelligence. The linear regression models for entrepreneurial success of women is following manner

$$Y = 0.121 + 0.915X_1$$

Where Y, X_1 , denote entrepreneurial success of women and overall emotional intelligence.

Null Hypothesis: H₂: Overall emotional intelligence and entrepreneurial success of women influence goal achievement

Table-2: Impacts of overall emotional intelligence, and entrepreneurial success of women on goal achievement

Variables	Unstandardized Coefficients		Adjusted R-square	t value	P value
	Beta	S. E			
(Constant)	-0.195	0.215	0.548	-0.909	0.364
Overall emotional intelligence	0.330	0.068		4.888	<0.001**
Entrepreneurial success of women	0.689	0.041		16.795	<0.001**

Note: ** Denotes significant at 1% level. * at 5% level

Table 2 shows the association between the predictors as overall emotional intelligence and entrepreneurial success of women and variable goal achievement using linear regression analysis. From the analysis we could conclude that the levels of goal achievement depend on ($p < 0.05$) the following independent variables namely, overall emotional intelligence, and entrepreneurial success of women. In addition, the estimation of overall emotional intelligence ($\beta = 0.330$) and entrepreneurial success of women ($\beta = 0.689$) are positive. Hence, goal achievement will improve 0.330, and 0.689 unit for every unit increase in overall emotional intelligence and entrepreneurial success of women respectively. The adjusted R-square (0.548) reveals 55 percent of variations in goal achievement depend on overall emotional intelligence and entrepreneurial success of women.

The multiple regression model for goal achievement is as follows: $Y = -0.195 + 0.330X_1 + 0.689X_2$

Where Y, X_1 and X_2 denote goal achievement, overall emotional intelligence, and entrepreneurial success of women respectively.

Null Hypothesis: H_3 : Overall emotional intelligence, work environment, entrepreneurial success of women influences the goal achievement.

Table-3: Impacts of overall emotional intelligence entrepreneurial success of women and goal achievement

Variable	Unstandardized Coefficients		Adjusted R-square	t value	P value
	Beta	SE			
(Constant)	6.353	0.210	0.469	30.244	<0.001**
Goal achievement	-0.365	0.045		- 8.111	<0.001**

Overall Emotional Intelligence	-0.322	0.068		- 4.773	<0.001**
Entrepreneurial success of women	-0.183	0.051		-3.625	<0.001**

Note: ** Denotes significant at 1% level.

Table 3 presents the association between the predictors as overall emotional intelligence, entrepreneurial success of women and goal achievement and the variable goal achievement using linear regression analysis. Based on the level of significance ($p < 0.05$), the goal achievement depends ($p < 0.05$) on overall emotional intelligence, entrepreneurial success of women and goal achievement. Also, the beta coefficients of overall emotional intelligence ($\beta = -0.322$), entrepreneurial success of women ($\beta = -0.183$) and goal achievement ($\beta = -0.365$) are negative. Hence, the turnover intention will decline 0.322, , 0.183 and 0.365 unit for every unit increase in overall emotional intelligence, entrepreneurial success of women and goal achievement respectively. . The adjusted R-square (0.469) specifies that 47 percent of variations in turnover intention depend on overall emotional intelligence, entrepreneurial success of women and goal achievement.

The multiple regression models for turnover intention is described in below:

$$Y = 6.353 - 0.365X_1 - 0.322X_2 - 0.183X_3$$

Where Y, X_1 , X_2 and X_3 , represent turnover intention, goal achievement, overall emotional intelligence, and entrepreneurial success of women respectively.

Summary and Conclusion:

Business requires lot of skills and patience and planning and perpetual performance with creativity and innovation. Women are good in creativity and innovation. The level of emotional intelligence and risk bearing capacity is moderate in nature. this reduces the level of emotional intelligence and there by success of women entrepreneurship in the sample area. The study results reveal that, overall emotional intelligence ($\beta = 0.915$) are positive which explicit entrepreneurial success of women will increase 0.915 unit for every unit increase in overall emotional intelligence. The adjusted R-square (0.307) states 31 percent of variations in entrepreneurial success of women depend on overall emotional intelligence.

Similarly, overall emotional intelligence ($\beta=0.330$ and entrepreneurial success of women ($\beta=0.689$) are positive. Hence, goal achievement will improve 0.330, and 0.689 unit for every unit increase in overall emotional intelligence and entrepreneurial success of women respectively. The adjusted R-square (0.548) reveals 55 percent of variations in goal achievement depend on overall emotional intelligence and entrepreneurial success of women.

Overall emotional intelligence ($\beta=-0.322$), entrepreneurial success of women ($\beta=-0.183$) and goal achievement ($\beta=-0.365$) are negative. Hence, the goal achievement will decline 0.322, , 0.183 and 0.365 unit for every unit increase in overall emotional intelligence, entrepreneurial success of women and goal achievement respectively. . The adjusted R-square (0.469) specifies that 47 percent of variations in goal achievement depend on overall emotional intelligence, entrepreneurial success of women and goal achievement.

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EMPLOYABILITY SKILLS OF TECHNICAL GRADUATES IN HYDERABAD CITY - A REVIEW ON FACTORS OF EMPLOYABILITY

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Executive Summary

Employability of technical graduates is deteriorating day by day. The reasons for the same are many. What influences the skill development and learning practices of students in technical graduates is the primary step in the evaluation of the same. The present paper is focused on studying the role of environment and organizational variables in the employability of the engineering graduates from Hyderabad city. For the purpose of the study, selected students from the engineering colleges in the city are drawn as sample using judgment sample method. The study is descriptive and exploratory in nature. The sample size for the study is fixed at 600 and the final analysis is done with 512 samples. The data required for the study is collected through a pretested structured questionnaire. All the students are from eighth semester and appearing for placements. Some of the students are already placed and waiting to complete the course. The combination of the experiences in the interviews and the skill gaps observed in the self assessment is presented. The study results reveal that, learning environment in the campus and the organizational factors has greater role in making the students study and learn the fundamental skills required to serve the industry and thereby on employability skills among the sample. A stringent regulation and evaluation system in association with industry institute interaction can change the situation in the years to come.

Key Words: Quality of learning- Organizational variables-Skill development-Training-Industry.

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Introduction

Learning environment and organizational practices are very important to make the students to study and to improve the basic and fundamental knowledge about the subjects and its practical use in the industry. The application oriented knowledge and skill is more important in engineering education rather than the theoretical knowledge. The combination of knowledge and skill is the crux of engineering. The teaching learning practices in engineering education should focus on practical and application oriented. Since the liberalization, and privatization private sector entry into engineering education was happen in a massive manner. Dilution of standards at all levels is initiated and it has impacted the employability of the graduates within a short span of time and becomes an issue. In this parlance, the present paper is focused on assessing the role of learning environment and the organizational variables in employability of the engineering graduates among the engineering colleges from Hyderabad is studied.

Research Methodology

The present paper is focused on studying the role of environment and organizational variables in the employability of the engineering graduates from Hyderabad city. For the purpose of the study, selected students from the engineering colleges in the city are drawn as sample using judgment sample method. The study is descriptive and exploratory in nature. The students participated in the survey are final years and appearing for the campus placements and few of them are placed. The sample size for the study is fixed at 600 and the final analysis is done with 512 samples. The data required for the study is collected through a pretested structured questionnaire. All the students are from eighth semester and appearing for placements. Some of the students are already placed and waiting to complete the course. The combination of the experiences in the interviews and the skill gaps observed in the self assessment is presented.

Objectives of the Study

1. To study the learning environment and its effects on employability of students among the engineering colleges in Hyderabad city.
2. To study the organizational factors influencing the employability skills of the engineering graduates in the sample area.

Hypothesis

1. H₁: There is no relationship between the Learning environment and employability of students among the engineering colleges in Hyderabad city.
2. H₂: Organizational factors influencing the employability skills of the engineering graduates in the sample area.

Data Analysis and Results Discussion:

The present chapter is dealing with data analysis using the different parametric and non parametric statistical tools through a computer version of SPSS package version 24.0. The tests are selected on the basis of the nature of data and the appropriateness of the usage of a technique.

Table 4.1 Descriptive of the variables of Learning environment and climate variables affecting the learning and employability of engineering graduates along with mean and SD

Environmental variables affecting employability	Mean	SD
Family and study atmosphere at home	3.60	1.289
Learning behaviour/attitude of surroundings (neighbor hood)	3.77	1.305
Learning habits of the friends/peer group	3.93	1.211
Learning habits of the reference groups	3.49	1.416
Learning bahaviour of siblings	3.98	1.148
Learning environment at school/college	3.83	1.361
Learning environment at play	3.94	1.436
Availability, affordability and accessibility of technology to learn	3.98	1.246
Awareness and adopting capacity of the ICT learning	3.94	1.215
Change management ability/Climate provided at college	4.00	1.076

Source: Primary data/ Structured Questionnaire

It is noted from the table 4.1, that, environment and climate related variables affecting the level of learning and there by employability of the engineering graduates from Hyderabad colleges are as follows. The prime learning environmental factors affecting employability in the order of degree of influence are Change management ability/Climate provided at college, Learning bahaviour of siblings, Learning habits of the friends/peer

group, Learning environment at play, Learning environment at school/college ,Learning environment at school/college respectively. It indicates that the learning environment at home and college are essential to improve the employability skills of the students.

Table 4.2 Descriptive of the Organizational variables influencing the employability of Engineering graduates along with mean and SD

Organizational Variables	Mean	SD
Availability of class rooms and its acoustics	3.60	1.289
Comfort ability in seating and hearing from the teacher	3.17	1.305
Free from Disturbance from the neighbor classes	3.12	1.211
Availability of subject experts/Degree of autonomy	3.49	1.416
Delivery capacity of the subjects by the faculty	3.73	1.148
Degree of involvement of teachers in delivery of subjects	3.83	1.361
Availability of books and other sources of learning	3.14	1.436
Accessibility of technology for learning(practical equipments)	3.88	1.246
Accessibility of teacher s to clarify doubts	3.84	1.215
Nature and behaviour of teachers in explaining the subjects	4.13	1.076

Source: Primary data/ Structured Questionnaire

The organizational variables affecting the learning and employability skills of the engineering graduates in the sample are indicated as follows. Accessibility of technology for learning(practical equipments) with the mean score of 3.88, Accessibility of teacher s to clarify doubts with the mean score of 3.84; Nature and behavior of teachers in explaining the subjects with the mean score of 4.13; Delivery capacity of the subjects by the faculty with the mean score of 3.73; Degree of involvement of teachers in delivery of subjects with the mean score of 3.83. These variables indicates the need for focusing on intellectual capital and teacher quality improvement and providing the learning ICT for the effective learning and skill development and thereby to improve the employability levels of the graduates in the engineering colleges.

Hypothesis-I: Ho: There is no significant difference between the perceptions of perceptual differences between the rural and urban students with regard to Learning environment and climate variables affecting employability among the engineering students.

Table 4.3 showing the t-test results showing the perceptual differences between the rural and urban students with regard to Learning environment and climate variables

affecting employability

Factors influencing employability	Place of birth/hailing from					
	Rural		Urban			
	Mean	SD	Mean	SD	t-value	P value
Learning environment and climate variables	80.69	7.11	78.06	8.29	3.644	0.000**

Since P value is less than 0.01, the null hypothesis, There is no significant difference between the perceptions of perceptual differences between the rural and urban students with regard to learning environment and climate variables affecting employability among the engineering students is rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference between the perceptions of perceptual differences between the rural and urban students with regard to learning environment and climate variables affecting employability among the engineering students. Based on the mean value, it is observed that students hailing from rural areas are strongly endorsed the same when compared top others in the sample. This may be due to the learning environment and climate of rural schools are still traditional and comprehensive. It is not so the case in urban areas. Hence, the changing learning environment makes the rural students strange and backward in studies. In some cases, the students adjust with the change and cope up with the environment. For others, a little special care and counseling can help them to boost their confidence and to create self confidence can help to learn better and to improve the employability among the students.

The role of institutions, teachers and parents is keen in doing such regular counseling to the students hailing from different back grounds. The level of care given has close association with the level of self confidence gained and improved the learning skills among the youth is observed in many researches. In addition, the physiological changes and biological changes of adolescents in the engineering colleges may face behavioural issues too. The tender care and systematic counseling helps to come out of this and to focus on studies and to enhance the employability skills. Regular visits of parents and contact with the students and giving a chance to express their personal needs and difficulties in the new environment can help to resolve the issues to a greater extent. Hence, the entire system and its components like teachers, management and parents are jointly responsible for the learning and employability. Management should create good infrastructure and facilities for academics, teachers should have high level of knowledge and updated skills to teach and parents should feel their role of involvement in the grooming their wards rather than just paying a fee and fly-off.

Hypothesis-II

Ho: There is no significant difference between the perceptions of students hailing from telugu medium and English medium with regard to role of organizational variables on the employability of the engineering graduates in the sample.

Table4.4 showing the t-test results showing the perceptions of students hailing from telugu medium and English medium with regard to role of organizational variables on the employability

Organizational	Medium of study					
	Telugu		English			
	Mean	SD	Mean	SD	t-value	P value
Organizational Factors influencing the employability	78.26	8.70	80.54	6.99	3.108	0.002**

Since P value is less than 0.01, the null hypothesis, the null hypothesis, there is no significant difference between the perceptions of students hailing from telugu medium and English medium with regard to role of organizational variables on the employability of the engineering graduates in the sample is rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference between the perceptions of students hailing from telugu medium and English medium with regard to role of organizational variables on the employability of the engineering graduates. Based on the mean value, it is noted that, students hailing from English medium is strongly endorsed that, organizational factors as a reason for employability gaps among the sample. The prime organizational factors responsible for employability skills are noted as Accessibility of technology for learning in terms of equipments, instruments, labs, consumables for practical subjects, Accessibility of teacher s to clarify doubts, Nature and behaviour of teachers in explaining the subjects, Delivery capacity of the subjects by the faculty, Degree of involvement of teachers in delivery of subjects in the order of priority. This clearly indicates the role of management to provide the required academic infrastructure and the role of teachers to deliver the subject knowledge in simple and understandable manner. The quality of teacher recruitment and training them through orientation and refresher courses is also depends on the management. Hence, it is concluded that, the role of management and teachers in the employability skills of the students is indisputable and confirmed.

In a deeper way, the regulatory bodies like UGC, AICTE, and certification bodies line NBA,ISO,and NAAC should insist the academic and infrastructure standards for engineering

colleges through the local government and having academic audit on the same can help in improving the situation to a greater extent. Creating good infrastructure, recruiting qualified and industry experienced faculty can help the students to learn better and employable. Hence, the role of local government in audit and regulation can be yet another measure to improve the quality of higher education and employability of the graduates.

Hypothesis-III:

Null Hypothesis: There is no significant difference among the branch of study and the perceptions on the role of learning environment variables impact on the employability skills of engineering graduates.

Table: 4.5: ANOVA Table showing the relationship among the branch of study and the perceptions on the role of learning environment impact on the employability skills of engineering graduates

Factors		Branch of study					F value	P value
		ECE	CSE	EEE	Mech	Civil		
Learning environment variables affecting employability	Mean	74.73	79.41	81.22	82.94	78.25	14.151	0.000**
	SD	(9.25)	(6.49)	(7.42)	(6.66)	(6.78)		

Since p value is less than 0.001, the null hypothesis, There is no significant difference among the branch of study and the perceptions on the role of learning environment variables impact on the employability skills of engineering graduates is rejected at 1% level of significance. Hence, it is concluded that, there is a significant difference among the branch of study and the perceptions on the role of learning environment variables impact on the employability skills of engineering graduates. Based on the mean value, it is noted that, the students from Mechanical engineering and electrical engineering branches are strongly endorsed the role of learning environment in the employability of the students among the sample. This may be due to the more number of practical subjects are there in the curriculum of the electrical and mechanical engineering when compared to other branches. These branches require special aids of learning and practicing. The primary learning variables influencing the employability are learning environment at college and the department; Learning environment at play; Availability, affordability and accessibility of technology to

learn; Awareness and adopting capacity of the ICT learning and Change management ability/Climate provided at college in the order of priority. Hence, it is concluded that the department, learning support resources availability in the campus, involvement of the management in creating the learning environment is responsible for lack of employability skills in the sample. Hence, the management needs to focus on creating learning hubs at faculty level and department level can help the students to upgrade themselves for the employable needs of the industry.

Today, open course wares designed and delivered by the reputed institutes and the ICT material available through digital libraries and the simplified versions of learning materials can be of great use to the students. Providing the same through library or sharing through cloud or wifi campus can help the students to learn better. Employability percentage is one of the parameters to measure the quality and reputation of the institute. The management should recognize this and focus can help them to sustain in the field for a long run.

Hypothesis-IV:

Null Hypothesis: There is no significant difference among the different levels of academic grade and the impact of organizational variables on the employability skills of the engineering graduates.

Table: 4.6: ANOVA Table showing the relationship between the different levels of academic grade and the impact of organizational variables on the employability skills of the engineering graduates

Factors		Academic Grade						
		S Grade	A Grade	B Grade	C Grade	D Grade	F- value	P value
Organizational variables affecting employability	Mean	75.85	80.55	79.45	80.67	83.96	14.910	.000**
	SD	(8.17)	(7.28)	(6.38)	(6.76)	(7.39)		

Since p value is less than 0.001, the null hypothesis, There is no significant difference among the different levels of academic grade and the impact of organizational variables on the employability skills of the engineering graduates is rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference among the different levels

of academic grade and the impact of organizational variables on the employability skills of the engineering graduates. Based on the mean value, it is noted that, students with grade-C and grade-D strongly endorsed the role of organizational variables in the employability of the students in the engineering colleges. The organizational variables affecting employability are of two types namely primary and secondary. The primary variables include, Accessibility of technology for learning (practical equipments), Accessibility of teacher s to clarify doubts and Nature and behaviour of teachers in explaining the subjects. The secondary variables include availability of books and other sources of learning at library, Comfort ability in seating and hearing from the teacher and Free from Disturbance from the neighbor classes. It clearly indicates the need for academic infrastructure facilities, logistics and acoustics at learning place and the ergonomic and eco friendly building design to provide comfortable and distraction free learning. These are barriers for learning and employability. This indicates the responsibility of planners and designers, academic institutions should be planned in a wide spread place and buildings should be designed eco friendly with natural lighting and ventilation, air. This can help in having a comfortable stay and learning. Hence, academic learning and employability indirectly affected by the organizational variables quoted. Hence, the policy measures on space and building designs ca help in building the comfortable learning structures and to have better learning environment and thereby employability.

5.0 Observations and findings

1. The prime environmental factors affecting learning and employability in the order of degree of influence are Change management ability/Climate provided at college, Learning bahaviour of siblings, Learning habits of the friends/peer group, Learning environment at play, Learning environment at school/college, Learning environment at school/college respectively.
2. The secondary environmental factors affecting learning are learning habits of the reference groups, Family and study atmosphere at home, and Learning behaviour/attitude of surroundings (neighbor hood). These are extorgeneous and uncontrollable variables. The student focus can be changed from these, by having a close observation and little care and counseling at times.
3. The major organizational variables affecting the learning and employability skills of the engineering graduates in the sample are Accessibility of technology for learning(practical equipments), Accessibility of teachers to clarify doubts, Nature

and behaviour of teachers in explaining the subjects, Delivery capacity of the subjects by the faculty, and Degree of involvement of teachers in delivery of subjects.

4. The minor organizational variables affecting the learning and employability skills of the engineering graduates are availability of books and other sources of learning at library, Comfort ability in seating and hearing from the teacher and Free from Disturbance from the neighbor classes.
5. There is a highly significant difference between the perceptions of perceptual differences between the rural and urban students with regard to learning environment and climate variables affecting employability among the engineering students. Based on the mean value, it is observed that students hailing from rural areas are strongly endorsed the same when compared to others in the sample.
6. Since P value is less than 0.01, the null hypothesis, the null hypothesis, there is no significant difference between the perceptions of students hailing from telugu medium and English medium with regard to role of organizational variables on the employability of the engineering graduates in the sample is rejected at 1% level of significance and confirms the highly significant relationship.
7. There is a significant difference among the branch of study and the perceptions on the role of learning environment variables impact on the employability skills of engineering graduates. Based on the mean value, it is noted that, the students from Mechanical engineering and electrical engineering branches are strongly endorsed the role of learning environment in the employability of the students among the sample. This may be due to the more number of practical subjects are there in the curriculum of the electrical and mechanical engineering when compared to other branches. These branches require special aids of learning and practicing.
8. There is a highly significant difference among the different levels of academic grade and the impact of organizational variables on the employability skills of the engineering graduates. Based on the mean value, it is noted that, students with grade-C and grade-D strongly endorsed the role of organizational variables in the employability of the students in the engineering colleges.

Suggestions and recommendations

1. **Counseling and confidence building:** The role of institutions, teachers and parents is keen in doing such regular counseling to the students hailing from different back grounds. The level of care given has close association with the level of self confidence gained and improved the learning skills among the youth is observed in many researches. In addition, the physiological changes and biological changes of adolescents in the engineering colleges may face behavioural issues too. The tender care and systematic counseling helps to come out of this and to focus on studies and to enhance the employability skills.
2. **Parental care and concern:** Regular visits of parents and contact with the students and giving a chance to express their personal needs and difficulties in the new environment can help to resolve the issues to a greater extent. Paying fee and flying off culture of the parents are leaving kids in the strange culture and attracted too many wrong and unwanted paths of life. Parents should remember that, institution is for all, not to your ward alone, hence, the focus of institution on each ward is less, when compared to a parent. Parental care and concern cannot be replaced by any one. Hence, parental care and counseling is other notable measure to the problem.
3. **Pillars of learning:** Management has to provide the required academic infrastructure and the role of teachers to deliver the subject knowledge in simple and understandable manner.
4. **Usage of open courseware:** open course wares designed and delivered by the reputed institutes and the ICT material available through digital libraries and the simplified versions of learning materials can be of great use to the students. Providing the same through library or sharing through cloud or wifi campus can help the students to learn better.
5. **Eco friendly knowledge hubs:** There is a strong need for academic infrastructure facilities, logistics and acoustics at learning place and the ergonomic and eco friendly building design to provide comfortable and distraction free learning. These are barriers for learning and employability. This indicates the responsibility of planners and designers, academic institutions should be planned in a wide spread place and buildings should be designed eco friendly with natural lighting and ventilation, air. This can help in having a comfortable stay and learning.

6. Summary and Conclusion

The present papers confirm the role of environment and organizational factors in the learning and employability of the engineering graduates in the Hyderabad city. It holds good for many places in the country. The primary role of institutional management, academic infrastructure, practical learning sources, qualified teachers and distraction free environment are identified and proved statistically significant. The secondary variables affecting learning like parental care and counseling, peer habits of learning and surrounding effects. The problem can overcome through counseling and confidence building, creating pillars of learning, use of latest courseware, and eco friendly knowledge hubs in the sample area. This can help all the stake holders to keep up their promises well and good. This can make the life like a poem... the woods are lovely dark and deep.... And to this, academic institutions should work like ...and miles to go before I sleep.. and miles to go before I sleep.

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“MARKETING PRACTICES OF DAIRY INDUSTRY IN INDIA: SOME PITFALLS”

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ABSTRACT

India has the largest cattle and buffalo population in the world. More than 67 percent of dairy animals are owned by marginal and small farmers, which constitute the core milk-production sector in the country. Many of these farmers own dairy animals primarily to supply milk for their own consumption. Slightly more than 30 percent of the milk produced in the country is retained in producer households. Eighty percent of milk is marketed through the highly fragmented unorganized sector, which includes local milk vendors, wholesalers, retailers, and producers themselves. The dairy sector is characterized by small-scale, scattered, and unorganized milk-animal holders; low productivity; inadequate and inappropriate animal feeding and health care; lack of an assured year-round remunerative producer price for milk; an inadequate basic infrastructure for provision of production inputs and services; an inadequate basic infrastructure for procurement, transportation, processing and marketing of milk; and lack of professional management.

The present study is conducted with the major objectives of

1. To study the origin and growth of milk producers and products marketing in India.
2. To study the Marketing Practices of Dairy products of Milk Producers in Tamilnadu.
3. To measure the marketing effectiveness of dairy products of milk producers in Tamilnadu.

The study results indicates that the dairy industry has got lot of potential in India, if properly planned and organised the farming, procurement and supply chains framing and distribution channel management in time and to the reach of customers to satisfy at all points of time. The team work of marketing function should activate with proper climate and systems and motivation. This can help in achieving the visionary goals of dairy marketing in India.

Keywords: Milk - Supply chains- Animal feeding- Unorganized- Procurement price.

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1.2: Introduction

Operation Flood and dairy co-operatives emerged in India as the largest rural employment scheme, enabling the modernization of the dairy sector to a level from where it can take off to meet not only the country's demand for milk and milk products but can also exploit global market opportunities. This study reviews the existing status of milk marketing and dairy co-operatives in India and provides recommendations to meet future challenges. It is found that the dairy co-operatives play a vital role in alleviating rural poverty by augmenting rural milk production and marketing. Involvement of intermediaries; lack of bargaining power by the producers; and lack of infrastructure facilities for collection, storage, transportation, and processing are the major constraints which affect the prices received by producers in milk marketing. Milk quality, product development, infrastructure support development, and global marketing are found to be future challenges of India's milk marketing.

The dairy sector is characterized by small-scale, scattered, and unorganized milk-animal holders; low productivity; inadequate and inappropriate animal feeding and health care; lack of an assured year-round remunerative producer price for milk; an inadequate basic infrastructure for provision of production inputs and services; an inadequate basic infrastructure for procurement, transportation, processing and marketing of milk; and lack of professional management.

Table1.1: showing dairy consumption trends between 1991-2009

Consumption(kg/capita/year- Milk)

Country	1991	2009	CAGR in %	Remarks
North America	253.5	250.2	-0.1	Consumption is declining or stagnant in developed countries
Oceania	219.4	178.1	-1.2	
Europe	202.5	219.5	0.4	
South America	100.7	129.9	1.4%	Consumption is increasing in developing countries
World	75.9	87.3	0.8	
India	51.4	72.2	1.9	
Africa	36.5	43.9	1.0	
Asia	32.5	54.4	2.9	Growth is close to 3% in asia
China	6.4	29.8	8.9	Growth in consumption is closed to 9% in china

Source: FICCI-360 an overview of dairy sector in India Report by PWC 2012.

Table 1.2: Showing world milk production list of countries and participation in world exports

world milk production			Participation in world exports		
Country	Milk production in million tones	Rank	Country	Export quantity(MTs)	Rank
EU	144	1	Newgiland	55	1
INDIA	129	2	EU	21	2
USA	91	3	Aurgintina	13	3
CHINA	34	4	Australia	7.3	4
Russia	32	5	Philippines	1.1	5
Brazil	31	6	Others	5.3	6

India is the world's largest producer of dairy products by volume, accounting for more than 13% of world's total milk production, and it also has the world's largest dairy herd.

2.1: Review of Literature

Pawar and Sawant (1995) examined the marketing efficiency of three channels— private, cooperative and government—in Western Maharashtra. Their results suggest that private dairies paid somewhat higher prices to the producers and still managed to supply milk to the consumer at competing prices. This was due to higher efficiency in procurement, processing, transportation and distribution. A sample survey conducted by **Jain & Sharma (1995)** in two different regions of the country, to examine the consumer opinion for purchase of milk and milk products in rural and urban areas of Northern and Southern India offered some interesting observations: In urban areas of northern region nearly 65 percent of sample households purchased milk and milk products from informal sector and In rural areas, a significant number of consumers (nearly 70 percent) did not purchase milk products from formal sector and prepared at home. Remaining 30 percent households bought milk products from informal sector. A study in Meerut district of Western UP by **Sangh (1993)** reported that except co-operative societies all the milk purchasing agencies extended cash advance to influence the producer and collect milk at low prices. **Katha & Kaur (1995)** in their study observed that in the absence of any organized sector, the nomadic gujjars of the urban area in Punjab sold the largest proportion of their produce to the creameries despite very low price paid by this agency. Similarly, in Karnataka small farmers were reported to sell more milk to vendors than to Milk Producers' Cooperative Society (MPCS) since they took loans from the vendors, with an agreement to sell milk to them (**Patil et. al., 1998**).

3.1: Research Methodology

The present study adopted descriptive and empirical approach to explain the existing marketing environment for the dairy industry in the sample area and to provide the empirical evidences from the sample survey. The hybrid method of methodology helps to adopt to the study and to present the facts and figures with the supported descriptive. It helps the reader to understand the market climate and environment and to link the marketing effectiveness affecting factors and its relevance in the sample area. For the purpose of study, data required is collected from both primary and secondary sources. The pilot study was conducted by distributing 100 questionnaires to marketing executives from the milk producing companies in the sample area. Cronbach Alpha Test was used to determine the degree of consistency among the multiple measurements of each factor and overall alpha is found at 0.864 and reliable. The major objectives of the study are presented in the following lines.

1. To study the origin and growth of milk producers and products marketing in India.
2. To study the Marketing Practices of Dairy products of Milk Producers in Tamilnadu.
3. To measure the marketing effectiveness of dairy products of milk producers in Tamilnadu

4.1 Data Analysis and Results Discussion

This section is used to explain the profile of the sample and its demographics and its relevance in the study. For this purpose, a simple frequency analysis is used to classify the sample on the basis of its demographic characteristics and also presented in the form of bar diagrams for an easy understanding of a layman.

4.2.1: Data Analysis using Frequency/ Percentage analysis

Table 4.2.1 Distribution of sample on the basis of Gender

Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	522	79.1	79.1	79.1
Female	138	20.9	20.9	100.0
Total	660	100.0	100.0	

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

It is noted from the above table 4.2.1 that, the sample consists of 79.1 percent of male employees and the remaining 20.9 percent of female employees in the sample. It indicates that the large number of employees working in the dairy industry is male. It is due to the

early and late hours of work in the industry and associated with travel. The trend is slowly changing with the entry of private dairy firms in to industry and the line of products introduction to dairy industry. In addition, the marketing through electronic and communication media becomes popular and it gives an opportunity to women to enter in to the sector and perform the marketing activities in the market. The notable feature here is till public sector dairy firms depends on male employees to perform its marketing activities, where as private firms engage women employees in all the divisions including production and distribution. This can bring a change in the ensuing days and the role of women in marketing can pave a different dimension of growth and development.

Table 4.2.2: distribution of sample on the basis of Age Group in years

Age group in years	Frequency	Percent	Valid Percent	Cumulative Percent
Below 20	60	9.1	9.1	9.1
21-30	310	47.0	47.0	56.1
31-40	110	16.7	16.7	72.7
41-50	83	12.6	12.6	85.3
Above 50	97	14.7	14.7	100.0
Total	660	100.0	100.0	

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

It is noted from the above table 4.2.2, that the 47 percent of the employees working in the dairy firms engaging marketing function are belongs to 21-30 years, it is followed by another 16.7 percent are belongs to 31-40 years age group. It clearly indicates that more than 72.7 percent of the employees working in the marketing function of dairy industry are belong to less than 40 years age group. The youngsters and higher productive age group employees are performing marketing function. It is obvious that the nature of marketing activities require young and energetic talent to meet the performance requirements and the competition in the market.

Table 4.2.3: distribution of sample on the basis of Educational Stream

Educational Stream		Frequency	Percent	Valid Percent	Cumulative Percent
	Upto SSLC	91	13.8	13.8	13.8
	HSc	142	21.5	21.5	35.3
	UG	146	22.1	22.1	57.4
	PG	172	26.1	26.1	83.5

	Professional	109	16.5	16.5	100.0
	Total	660	100.0	100.0	

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

Based on the frequency analysis of the sample, it is observed from the table that, higher secondary, under graduate and post graduates are more in number among the employees working in dairy industry. Marketing of dairy product line requires basic attitude for marketing and interest towards a career in marketing. In addition, dairy product line today is classified as valued products and normal products. For normal products is concerned, no much efforts are needed and average skilled employees are sufficient to engage the marketing functions where as for other product lines marketing employees requires with some expertise in design and implementation of marketing push strategies in the field marketing. Hence, the above distribution indicates the dairy product line is broadly classified into three or more categories and each group of product line is taken care by a separate group of employees with different levels of skill sets and educational back ground. It was also confirmed through informal interviews with the employees during the sample survey.

Table 4.2.4: Distribution of sample on the basis of Experience in years

Experience in years	Frequency	Percent	Valid Percent	Cumulative Percent
Below 5	156	23.6	23.6	23.6
5-10	232	35.2	35.2	58.8
11-15	97	14.7	14.7	73.5
16-20	80	12.1	12.1	85.6
Above 20	95	14.4	14.4	100.0
Total	660	100.0	100.0	

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

It is noted from the above table 4.2.4, that 35.2 percent of the employees in the sample are with 5-10 years experience in the dairy marketing and the another 23.6 percent of the employees are with below 5years work experience in marketing.

Further it is observed that in total 58.8 percent of the employees in dairy marketing are having less than or equal to ten years experience. Based on these facts, it is inferred that, dairy marketing is started in the recent past. There may be traditional channels of marketing in the earlier days. The formal and mass productive and with full pledged product line marketing is recent in nature. The prime reason for the same may be , for a quite a long time, dairy industry in India and in Tamilnadu is monopoly with the co-operative milk societies.

Milk production and distribution was not recognized as a major business activity. Farmers usually any excess quantity of milk available after domestic consumption is supplied to co-operative society or to the local hotels at nominal basis.

Null Hypothesis: There is no significant difference between mean ranks of marketing practices followed in dairy industry.

Table 4.6.1 Friedman test for significant difference between mean ranks of marketing practices in dairy industry.

S. No	Marketing Practices followed	Mean Rank	Chi-square value	P value
1	Selling milk to licensed Retailers/shops	8.41		
2	Executing a milk purchase contract	7.22		
3	Notifying the Department of any late payments	7.95		
4	Ensuring minimum farm prices	8.71		
5	Pay producers in a timely manner	8.68		
6	Comply with report filings with Quality	7.69		
7	Check on hygiene and quality	8.27		
8	Discrimination in price between distributors	7.79	156.147	0.000**
9	No Pampered and false advertisements	6.86		
10	Customization of the marketing mix	7.38		
11	Economy Pricing strategy	8.40		
12	Standardized distribution networks	8.09		
13	New product development on time	7.97		
14	Effective customer grievance handling	8.43		
15	Effective Market Research	8.14		

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

Since p value is less than 0.001, the null hypothesis, There is no significant difference between mean ranks of marketing practices followed in dairy industry is rejected at 1% level of significance. hence, it is concluded that, There is a highly significant difference between mean ranks of marketing practices followed in dairy industry. Based on the mean ranks, it is found that, selling milk to licensed distributors, ensuring minimum farm prices, pay producers in time, economy pricing strategy, standardized distribution net works, and effective consumer grievance handling are the most opted marketing practices in the dairy industry in the sample area. This indicates the market immaturity in dealing the

various functions of marketing in a professional manner.

Table 4.2.14 showing the measuring tools of marketing effectiveness in dairy industry

S. No.	Measuring tools of marketing effectiveness	Mean	SD
1	Growth is sales and profits	3.45	1.443
2	Length and depth of product line	3.46	1.413
3	Speed of market expansion and new markets entry	3.27	1.413
4	Market share and competency building	3.31	1.365
5	Individual and group target position	3.51	1.317
6	Market position and competitiveness	3.29	1.424
7	Brand image and social reach	3.45	1.407
8	Networks development and social reach	3.52	1.369
9	Awards and Patents, trade marks	3.57	1.400
10	R&D Facilities and quality standards	3.57	1.364

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

It is found from the table 4.2.14, that the marketing effectiveness can be measured through the set of variables given in the above table. The appropriate tools quoted in the sample survey are Individual and group target position with the mean score of 3.51, networks development and social reach with the mean score of 3.52, awards, patents and trademarks with the mean value of 3.57 and Research and development facilities with quality standards with the mean value of 3.57 in the sample survey. It is not the sales and profit alone indicates the effectiveness of marketing. Hence, it is necessary to focus on quality, research and social reach through diversified products can be the better measures to identify the marketing effectiveness in the dairy industry.

Null Hypothesis: There is no significant difference between mean ranks of factors affecting marketing effectiveness in dairy industry.

Table 4.6.2 Friedman test for significant difference between mean ranks of factor affecting marketing effectiveness in dairy industry.

S. No.	Factors affecting Marketing effectiveness	Mean Rank	Chi-square value	P value
1	Demographical composition of market area	9.72		
2	Current and projected economic conditions	10.58		
3	Size, growth potential, and prosperity of	10.79		

	the market			
4	Market potential and market share	9.51		
5	Environmental and supply related issues	10.73		
6	Present customer composition	11.04		
7	change attitudes, culture and consumption patterns	10.70		
8	Inflation and Recession and disposable income	10.42		
9	Competition and Promotional activities	11.07		
10	Technology and public reach through new doors	10.63	121.208	0.000**
11	Education, awareness and language of customers	9.62		
12	Social organization and reference groups	10.51		
13	Marketing intermediaries and margins	10.44		
14	Restrictions on product/process standards	9.28		
15	Legal and government environment	10.63		
16	External agency designed of market strategy	10.82		
17	Lack of top management involvement	10.72		
18	No focus on employee training and development	11.15		
19	Lack of administrative setup	11.22		
20	Lack of managerial knowledge and skills	10.41		

Source: Primary data/ Structured Questionnaire/Dairy firms/Tamilnadu/Jan-Dec 2013.

Since p value is less than 0.001, the null hypothesis, There is no significant difference between mean ranks of factors affecting marketing effectiveness in dairy industry is rejected at 1% level of significance. Based on this, it is inferred that, there is a highly significant difference between mean ranks of factors affecting marketing effectiveness in dairy industry. Based on the mean ranks, it is found that, the primary factors affecting marketing effectiveness in dairy industry are present customer composition, competition and promotional activities, employee training and development and lack of administrative setup for the long run survival. It is advisable to focus on all these areas on war footing basis can help in improving the sustainable effectiveness of marketing in the dairy industry.

5.1: Summary and Conclusion

On the demand side, the situation is buoyant. With the sustained growth of the Indian economy and a consequent rise in the purchasing power during the last two decades, more and more people today are able to afford milk and various other dairy products. This trend is expected to continue with the sector experiencing a robust growth in demand in the short and medium run. If the impediments in the way of growth and development are left unaddressed, India is likely to face a serious supply - demand mismatch and it may gradually turn into a substantial importer of milk and milk products. Fortunately, the government and other stakeholders seem to be alive to the situation and efforts to increase milk production have been intensified. Transformations in the sector are being induced by factors like new found interest on the part of the organized sector, new markets, easy credit facilities, dairy friendly policies by the government, etc. Dairy farming is now evolving from just an agrarian way of life to a professionally managed industry - the Indian dairy industry. With these positive signals, there is hope that the sector may eventually march towards another white revolution.

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THE SOCIO-ECONOMICAL IMPACTS AND OPPORTUNITIES TO THE RURAL ENTREPRENEURS IN TAMILNADU

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ABSTRACT

Background: This study has been conducted to understand the socio-economical impacts and Opportunities to the rural entrepreneurs especially in Tamilnadu. The research has considerable based on psychological and economic approaches to rural entrepreneurship, the influence of socio-economic on business development.

Purpose: The aim of this study is to integrate from a theoretical perspective, socio-economic factors and opportunities towards an entrepreneurial activity. This study will helps to develop in future research analysis the various factors impacts and opportunities that influence the decisions to create new businesses.

Methods: The samples of 150 respondents was selected from the rural entrepreneurs at different fields by using functional, descriptive and field survey as research design under convenience study. The questionnaire formed from the basic source of primary data secondary data. The collected data was analyzed by using statistical tools are percentage analysis, Rank Correlation and chi-square analysis.

Conclusion: In conclusion, the main socio – economical impacts and opportunities were identified regarding the rural entrepreneurship. Similarities and differences of the existing framework and actual empirical findings were summarized. The development of new business through rural entrepreneurs directly impact on socio-economic grow and prosper. Although there has been considerable research based on, the influence of socio-economical factors. Such as religion, ethnicity, family, physical attributes, economic status, education make an impact on entrepreneurial development process in developing country.

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1.2 INTRODUCTION:

RURAL ENTREPRENEURSHIP:

Meaning:

Rural entrepreneurship has different meanings 2 different people. It can be simply defined as entrepreneurship emerging in rural areas is rural entrepreneurship. In other words rural entrepreneurship refers to establishment of industrial units in the rural areas. Rural Industries are generally associated with agriculture.

Opportunities of Rural Entrepreneurship:

Support & Motivation to local people: Rural entrepreneurs have a lot of support from the rural people. Rural village people always encourage and give the motivation to the entrepreneurs.

Low establishment cost: When compared to the urban areas, rural entrepreneurs' business establishment cost is very low.

Competitive advantages / Availability of labour: In India seventy percent of the people are living in the village. Majority of the rural people are depending on the agriculture. The agriculture work is not available throughout the year.

Government policies and subsidies: The government of India policies are very flexible, innovative, liberalized and giving continues support to rural entrepreneurs.

Availability of raw materials: raw materials are available in the rural area that is the reason there is no transportation cost and flotation cost.

Cost of production: Rural entrepreneurs cost of production is very low when compared to the urban industries. The factors of production are available with low cost; automatically the cost of production is also low.

Optimum utilization of produces: Optimum utilization of farm produces is only possible through the rural entrepreneurship only. Most of the rural entrepreneurs depend upon the farm produces as raw materials.

Employment generation for rural youth: Rural entrepreneurs are providing hundred percent jobs for rural youth.

Promotion cost: There is no promotion cost for rural entrepreneurs; in fact the competition is very less. Particularly there is no need for advertising and other promotional activities for their products.

Potential customer: In this twenty-first century rural villagers are economically strong and also heavily populated. This heavy population can be converted as potential customers.

1.3 STATEMENT OF THE PROBLEM:

The poor state of most rural economies is very devastating and pathetic. Rural areas have peculiar problems of low income, low productivity, high degree of unemployment, high population rate, poor technological growth, low infrastructures, high illiteracy rate, malnutrition, etc. Entrepreneurial orientation to rural development, in contrast to development based on bringing in human capital and investment from outside, is based on stimulating local entrepreneurial talent and the subsequent growth of indigenous companies. To accelerate economic development in rural areas, it is necessary to increase the supply of entrepreneurs, thus building up the critical mass of first-generation entrepreneurs. But there are worries that progress in the promotion of rural entrepreneurship may be hindered by lack of or inadequate understanding of its concept and role in the rural sector. Therefore, the focus of this study was to investigate the perception of rural entrepreneurs on the nature and role of entrepreneurship in rural economic development.

1.4 OBJECTIVES OF THE STUDY:

- To create awareness among rural entrepreneurs and study their entrepreneurial traits and functions performed as entrepreneurs.
- To examine the adequacy/inadequacy of training facilities, support system and guidance extended to rural entrepreneurs.
- To identify the socio-economical factors which impede the development of entrepreneurial skills in Tamilnadu.
- To offer remedial measures and policy recommendations to streamline future strategies for enhancing entrepreneurship development among rural areas in the low income group.

1.5 NEED FOR THE STUDY:

- This study will help to improve the per capital income of rural people thereby reduces the gaps and disparities in income of rural and urban people.
- It facilitates the development of roads, street lighting, drinking water etc. in the rural sector due to their accessibility to the main market.
- This study will help to reduce poverty, growth of slums, pollution in cities and ignorance of inhabitants.
- This study will help to create an avenue for rural educated youth to promote it as a career.

1.6 SCOPE OF FURTHER STUDY:

Scope of Entrepreneurs Small- scale business provides good scope for the growth of entrepreneurial activities. An entrepreneur has good opportunity and vast scope in selling service rather than manufacturing a product. The rural entrepreneur can achieve better results if the size of the business is small. It is for this reason that small firms have higher productivity, greater efficiency and low labour turnover.

1.7 LITERATURE REVIEW:

Entrepreneurs: Wennekers and Thurik (1999) discuss that an entrepreneur in a company is one (or sometimes a few) person whose influence shapes the entire business. Due to the fact that such centralized management is usually a feature of small firms, the tight link between entrepreneurs and small business is established.

Entrepreneurship: is a term describing individuals that recognize the opportunities in order to satisfy needs and who gather resources to meet them (Jones, 1999). Entrepreneurs are regarded as innovative individuals who are responsible for the change and growth.

Entrepreneurship as a process:



The role of Rural Entrepreneurship in India:

The fundamental role is to provide employment opportunities and consequently, applying a check on migration. Industries in rural areas are mostly micro or tiny in structure and quick yielding. In other words, their gestation period is much less as compared to large scale industries. Rural industries are also labour intensive and provide substantial employment opportunities to rural folks of all age groups. Few examples of such type of industries are Food Processing industry, Poultry industry, cottage and handicrafts industry, etc. This also helps in balanced regional growth and promotion of artistic activities.

Entrepreneurship process in rural areas: pros and cons:

The following factors distinguish circumstances for entrepreneurs in rural areas:

1. Social environment

- Social capital: Relationships and trust among people created by developed social capital facilitate regional business cooperation and networking that can benefit entrepreneurs (Kjeldsen & Svensen, 2011). Since tamilnadu is a state of high social welfare and stability, rural entrepreneurs here gain advantages of social capital.

- Rural governance: Policies introduced by local governance structures are often directed towards promoting entrepreneurship.

- Local culture: Rural entrepreneurs can benefit from using unique local characteristics to differentiate and market their products/services. These can be represented as distinct specialty products, or healthy organic ones, for instance. Kneafsey, Ilbery and Jenkins (2001) believe that “culture economy” is a profitable force of development for rural regions.

2. Economic environment

- Infrastructure: Remoteness and high transportation costs make country businesses less competitive and attractive to customers, suppliers and employees. Adequate infrastructure is highly desirable and helpful to rural entrepreneurs (Stathopoulou et al., 2004).

- Business networks: Due to tighter relationships among residents of rural location, scholars argue that business networking becomes easier and more efficient. The networks can together reach larger markets, increase resilience, and give ability for every member to take more risks.

- Information and communication technologies (ICT): It is generally acknowledged that ICT opens unprecedented opportunities for SMEs in rural locations. Information is easily collectable, market boundaries are broadened, cooperation is assisted, and resources are much easier reachable with the help of ICT.

Importance of rural entrepreneurship:

Development of a country is depending on both rural and urban areas. Both of them are two different sides of the same coin of economic development (Saxena, 2012). Nowadays, rural development and entrepreneurship are connected more than ever before. Entrepreneurship is seen as strategic development interference that accelerates rural development process.

Besides, there seems to be a general agreement on the importance of locating businesses in rural areas; the interest of having firms locate in a specific area is a pervasive consideration in economic development. Rural areas have great difficulties to attract new businesses.

ARTICLES RELATED REVIEWS:

Ejiofor (1989) points out that entrepreneurship is the first step towards a self-reliant economy that can generate internal self-sustaining economic growth and development. A society is adjudged prosperous only to the degree to which it rewards and encourages entrepreneurial activity. Entrepreneurial activities are the critical determinants of the level of success, prosperity, growth and opportunity in any country. Entrepreneurship though desirable is usually fraught with difficulties and risks.

Hisrich and Peters (2002), note that entrepreneurship is the process of creating something different with values by devoting necessary time and effort, assuming the accompanying financial, psychological and social risks and receiving resulting rewards of monetary and personal satisfaction and independence.

Petrin (1994) describes rural entrepreneurship Asia force that mobilizes other resources to meet unmet market demand, the ability to create and build something from practically nothing, the process of creating value by pulling together a unique package of resources to exploit an opportunity.

Ostgaard and Birley, (1994): Socio-cultural environment in broad terms consists of both the social system and the culture of a people. It refers primarily to man created intangible elements which affect people's behavior, relationship, perception and way of life, and their survival and existence. In other words, the social-cultural environment consists all elements, conditions and influences which shape the personality of an individual and potentially affect his attitude, disposition, behaviour, decisions and activities. Such elements include beliefs, values, attitudes, habits, forms of behaviour and life styles of persons as developed from cultural, religious, educational and social conditioning,

Bennett and Kassarian, (1972) these elements are learned and are shared by a society and transmitted from generation to generation within that society. Thus, social-cultural environment, in relation to entrepreneurship, can be defined as consisting of all the elements of the social system and culture of a people which positively or negatively affect and influence entrepreneurial emergence, behaviour and performance, and entrepreneurship development in general. All such elements which condition the values, thinking and action of an individual with respect to entrepreneurship comprise the social-cultural environment of entrepreneurship.

1.8 RESEARCH METHODOLOGY:

Research – Meaning:

Research is an art of scientific investigation. According to Redman and Mary defines research as a “systematic effort to gain knowledge”. Research methodology is way to systematically solve the research problem.

Research design:

“A research design is an arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to research purpose with economy in procedure”.

Nature of data:

The primary data are collected from the employees of various educational institutions through a direct structured questionnaire. The secondary data was collected from company profiles, websites, magazines; articles were used widely as a support to primary data.

Questionnaire as a tool:

The questions are arranged logical sequence. The questionnaire consists of a variety of questions presented to the entrepreneurs for the response. Dichotomous questions, multiple choice questions, rating scale questions were used in constructing questionnaire.

Scales in questionnaire:

The scaling used in this method is said to be Likert’s 5 point scaling method. The scaling consists of: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree.

Sampling:

Sampling design is a definite plan for obtaining samples from given population? 150 respondents were selected from the entrepreneur’s categories. So the researcher adopts the simple random sampling technique using lottery method. The researcher selected the respondents from all categories of rural entrepreneurs by using convenience sampling.

Size of the sample:

It refers to the number of items to be selected from the universe to constitute as a sample. In these study 150 respondents in Tamilnadu was selected as size of sample.

Quantitative vs Qualitative approach:

Quantitative method such as statistics, testing a hypothesis or finding variables is a useful approach; however it is rejected in this study because it is not relevant to the topic. Since quantitative research, as stated, is used when research data can be measured, it is clearly not suitable for the purpose of this proposal, which is concerned with discovering entrepreneur’s impacts and opportunities in rural areas in case of small firms. Qualitative

approach is also advantageous since the main interest of authors is the small firms' cases and experiences.

STATISTICAL TOOLS APPLIED:

Percentage analysis:

In percentage analysis, charts like bar chart and pie chart are used to graphically represent the results from percentage analysis of the questionnaire.

$$\text{Percentage of Respondent} = \frac{\text{No. of Respondent}}{\text{Total no. of Respondent}} \times 100$$

Chi – square analysis:

It is one of the most widely used non-parametric tests in statistical work. The chi – square was first used by Karl Pearson in the year 1900. Chi- square test is applicable to a very large number of problems in practice.

$$X^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i},$$

Where,

X^2 = the test statistic that asymptotically approaches a χ^2 distribution.

O_i = an observed frequency;

E_i = an expected (theoretical) frequency, asserted by the null hypothesis;

n = the number of possible outcomes of each event.

Rank Correlation:

The Spearman correlation coefficient is often thought of as being the [Pearson correlation coefficient](#) between the [ranked](#) variables. If there are no tied ranks, then ρ is given by:

$$r_{\text{rank}} = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

1.9 LIMITATIONS OF THE STUDY:

- The sample size was limited and thereby could not take into account all the rural entrepreneurs in Tamilnadu for the study.
- A few respondents had chosen multiple options where only one option was required according to the question. The detailed analysis about the process is difficult.

- The respondents may give false information. Difficulty in obtaining relevant materials from the institutions.

1.10 FINDINGS FROM THE STUDY:

- ❖ Majority of respondents were found male, age between 35 – 45 years and graduation.
- ❖ Majority (48%) of respondents are experience below 5 years.
- ❖ Majority (45%) of respondents said that availability of resources opportunity offered by the government is not satisfactory.
- ❖ Majority (44%) of respondents said that business is in secured by the climate change is disagree.
- ❖ Majority (54%) of respondents said that their present environmental factors and government policies are disagreeing.
- ❖ There is no significant relationship between the gender of the respondents and various opportunities to the rural entrepreneurs in Tamilnadu.
- ❖ There is negative condition between the socio-economic environmental factors impacts to the rural entrepreneurs in tamilnadu

1.11 SUGGESTIONS AND RECOMMENDATIONS:

- Government support is highly needed for the success of rural entrepreneurs. Therefore, policies and financial assistance from the government and its agencies should be extended to the rural sector to create an enabling environment.
- Rural areas should be made as attractive as urban areas in terms of infrastructure provisions. Provision of infrastructural facilities such as accessible roads, communication facilities, electricity and security will go a long way to create an enabling environment for entrepreneurial activities to thrive.
- **Raw material:** the availability of raw material is a must for any industry. It is clear from the past experience that rural Industries having employment potential cannot be sustained for long unless a strong raw material base is created in rural areas itself.
- **Finance:** it is need to be available on time for those who really need it.
- **Entrepreneurial education:** it is one of the effective ways to inculcate the entrepreneurial Acumen and attitudes impart entrepreneurial education in schools, colleges, and Universities.
- **Unawareness:** a need to disseminate information about all that is available to provide to the entrepreneurs to facilitate them in setting up of the industries.

- **Set up modern infrastructure:** a need to set up common production-cum-marketing centres and developed with modern infrastructural facilities in the areas having good production and growth potential that helps in promoting export business.

1.12 CONCLUSION:

Today, Entrepreneurial development along with management has over come to be recognized globally as the key to rapid and suitable economic development as well as the welfare and progress of mankind. The socio-economic environment has all its dynamics to influence the environment as well as individual values which directly influence his decisions and actions in all endeavors. The study reveals the impact of socio-economic environment on rural entrepreneurship possess a challenge about the need for the state to have new values and orientation favorable to entrepreneurship and emergence of rural entrepreneurs.

Rural Entrepreneurship plays an important role for economic development in developing countries such as that of India. It is evident from the study that rural entrepreneurs are ready to face the challenges associated with setting up of business. To bring a change the institutions needs to focus on synergies between Education, Innovation and Entrepreneurship should be encouraged. Therefore, the rural entrepreneurs need to be motivated to take up entrepreneurship as a career, with training and sustaining support systems providing all necessary assistance.

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A MEASURE OF CUSTOMER SATISFACTION THROUGH APPLICATION OF SERVQUAL WITH SPECIAL REFERENCE TOPUBLIC BANKS IN CHENNAI

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ABSTRACT

The purpose of the research article is to evaluate customer satisfaction towards services offered by public banks in Chennai. Customer satisfaction is indispensable for every company under the sky. It is a measure of meeting or expecting customer satisfaction. The satisfaction level of 120 customers is measured through SERVQUAL instrument. In this paper major aspects of Service Quality dimensions are Reliability, Assurance, Tangibility, Empathy and Responsiveness are considered. Data collection through Service Quality Questionnaire. The result of the study shows that significant percentage of respondents were satisfied with ATM, net banking and mobile banking facility. The outcome of the study also presents the average gap score for all the considered SERVQUAL dimensions. More gap is identified in empathy dimension. It is also given that little gap exists in tangibility and reliability dimensions.

Keywords: *Customer Satisfaction, Public sector Banks, SERVQUAL*

INTRODUCTION

The purpose of this paper is to analyse satisfaction level in banking sector in Chennai city. The customer orientation of any sector has significantly increased in recent times. Banking sector is no exception to this. The introduction of a new variety of products and services with emphasis on quality of service clearly indicates how banking industry addresses the issue of customer needs and adopting customer-centric approach. The study investigates the effect of quality on satisfaction by focusing on the relationship between service quality and customer satisfaction and also how quality can be improved in the service firms.

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The leaders in banking has to successfully integrate technology with the business strategies. One way of addressing to the ever increasing expectations of the customers is to make management to realize that only through innovative thinking they can contribute significantly to the profitability and image of the organization. The difference between the services expected and the service rendered constitutes the service gap. Lower the gap, more pleased the customers are. The level of customer satisfaction is being measured in terms of the quality of services provided with the help of SERVQUAL. SERVQUAL takes into account the customers' perceptions of relative importance of service attributes. Data is collected from a sample of customers through the Structured Questionnaire. They are asked to respond to a series of questions which are based around a number of key service dimensions.

LITERATURE REVIEW

Vibhor Jain et.al (2012), this study was conducted to understand the perception of service quality and how it impact customer loyalty. It has taken the SERVQUAL tool for measurement of the service quality offered by the private players in the banking industry. The responses were collected based on the five dimensions namely; reliability, assurance, tangibility empathy, and responsiveness. It identifies that reliability and responsiveness are the most relevant factors for the services quality perception.

Elavarasi(2014), the result of the study concludes that commercial bank provides better service with regards to e-banking services to customers and identified satisfaction level of customer view about internet banking website of banks. From the analysis it is inferred that age, educational qualification, occupation, income level of customer are significant factor that decide usage of e-banking services of various banks in the study area. The findings were to increase awareness among people.

Minjoon Jun (2011), the objective of the study is to understand the customer perceptions on the internet service quality through the various dimensions associated with the satisfaction. The various incidents happened with the customers were content analysed. The main four dimensions for customer service quality as Access, Courtesy, Responsiveness and Reliability. Critical Incident Technique (CIT) was used to identify the key indicators of the internet banking service quality. It is concluded that Reliability is more important to enhance satisfaction of customers.

OBJECTIVES OF THE STUDY

- To analyze customer's satisfaction on services offered by public banks in Chennai city.
- To suggest suitable remedial measure to improve banking services.

SCOPE OF THE STUDY

The concept of measuring the difference between expectations and perceptions in the form of the SERVQUAL gap score proved very useful for assessing levels of service quality. Information on service quality gaps can help managers diagnose where performance improvement can best be targeted. Customer satisfaction measurement helps to promote an increased focus on customer outcomes and stimulate improvements in the work practices and processes used within the bank. It also explore the service quality of public sector banks through various aspects.

LIMITATIONS OF THE STUDY

The study is restricted in the scope owing to the following limitation.

- The study is limited to particular geographical area that is Chennai region only.
- The information and data collection and analysis is restricted to the researcher's knowledge and ability.
- The answer that researcher have got from customer cannot be considered as totally perfect because of the various personal and other limitations.

METHODOLOGY

Research Design: Descriptive Research

Data Collection: In order to collect the primary data, a questionnaire is prepared which aims at fulfilling the objectives of the research work.

Sampling Technique: Convenience Sampling

Sampling size: 120

Area of the Study: The study was undertaken in Chennai district.

Tools used for analysis: Customer's satisfaction measured using SERVQUAL model.

ANALYSIS & DISCUSSIONS

36.67% of the customers are satisfied with number of transaction in ATM services.

43.33% of the customers are satisfied with internet banking services.

56.67% of the customers are satisfied with mobile banking services.

GAP SCORE

The model of service quality is built on the expectancy-confirmation paradigm which suggests that consumers perceive quality in terms of their perceptions of how well a given service delivery meets their expectations of that delivery. Thus, service quality can be conceptualised as a simple equation:

SQ = P- E, where; **SQ** is service quality, **P** is the individual's perceptions of given service delivery and **E** is the individual's expectations of a given service delivery.

When customer expectations are greater than their perceptions of received delivery, service quality is deemed low. When perceptions exceed expectations then service quality is high. The model of service quality identifies five gaps that may cause customers to experience poor service quality. In this model, gap 5 is the service quality gap and is the *only* gap that can be directly measured. In other words, the SERVQUAL instrument was specifically designed to capture gap 5. In contrast, Gaps 1-4 cannot be measured, but have diagnostic value.

Table 1: Tangibility Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Modern looking equipment	6.6	6.1	0.5
Physical facility	6.7	6.1	0.4
Employee are well dressed	6.8	5.9	0.7
Materials are visually appealing	6.9	6.1	0.6
Average gap score			0.55

Table 2: Reliability Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Delivers service at promised time	6.7	5.7	1

Interest in solving problem	6.6	5.6	1
Perform service right first time	6.6	5.7	0.9
Follows the promised time	6.6	5.7	0.9
Maintain error free records	6.9	6.4	0.5
Average gap score			0.86

Table 3: Responsiveness Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Tell you about performance of service	6.7	5.9	0.8
Gives prompt service	6.4	5.6	0.8
Willingness to help	6.5	5.6	0.9
Not busy to respond queries	6.4	5.1	1.3
Average gap score			0.95

Table 4: Assurance Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Instills confidence	6.8	5.9	0.9
Safe transactions	6.7	6.3	0.4
Employees are consistently courteous	6.4	5.3	1.1
Employee have enough knowledge	6.6	6.1	0.5
Average gap score			0.73

Table 5: Empathy Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Gives individual attention	6.4	4.8	1.6
Convenient operating hours	6.6	5.7	0.9
Gives personal attention	6.3	4.9	1.4
Best interest in heart	6.6	5.7	0.9
Understand customer's specific needs	6.6	5.2	1.4
Average gap score			1.24

Table 6: Accessibility Dimension Expectation and Perception

STATEMENTS	EXPECTATION	PERCEPTION	SERVICE GAP (E-P)
Convenient branch locations	6.7	5.7	1
Extended working hours	6.4	4.9	1.5
ATM network	6.8	5.7	1.1
Safe net banking and mobile banking	6.3	5.8	0.5
Average gap score			1.03

Table 7: Average Gap Score of Public Sector Banks (Unweight)

S.NO	DIMENSIONS	GAP SCORES
1	Average score for Tangibles	0.55
2	Average score for Reliability	0.46
3	Average score for Responsiveness	0.95
4	Average score for Assurance	0.73
5	Average score for Empathy	1.24

6	Average score for Accessibility	1.03
TOTAL		5.36
Average (total/6) Un-weighted score		0.893

Table 8: Highest Gap Scores of Public Sector Banks

S.NO	ATTRIBUTES	DIMENSIONS	GAP SCORES
1	Banks will give customers individual attentions	EMPATHY	1.6
2	Banks has Extended Working Hours to meet customer needs	ACCESSIBILITY	1.5
3	Banks has employees to give customer's personal attention.	EMPATHY	1.4
4	The employees of banks will understand the specific needs of their customers	EMPATHY	1.4
5	Employees of banks will never be too busy to respond to customer's request	RESPONSIVENESS	1.3

Table 9: Lowest Gap Score of Public Sector Banks

S.NO	ATTRIBUTES	DIMENSIONS	GAP SCORES
1	Customers of banks feel safe with transaction	ASSURANCE	0.4
2	Bank has modern looking equipment	TANGIBLES	0.5
3	Material associated with service are visually appealing	TANGIBLES	0.6
4	Employees in banks tell customers exactly when service will be performed	RESPONSIVENESS	0.8

5	Employees in banks are always be willing to help customers	RESPONSIVENESS	0.9
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CONCLUSION

The gap analysis shows that empathy is having more gap between customer expectation and perception of service quality. The bank has to reduce this gap giving individual personal attention to understand the customer specific needs. Next to empathy more gap was observed in accessibility dimension. The customers of the banks expect to extend the working hours in Saturday for their convenience. And also some of the customers are dissatisfied with ATM maintenance. So the bank management should concentrate on proper maintenance of ATM. In responsiveness dimension, there is more gap in attribute responding customer queries in busy time. The employees willingly come forward to solve the customer problem. Banks have to understand the changing needs of customers, their aspirations and expectations to create value. Banks should also have a strong customer relationship management system that would indicate the worth of the customer and be able to understand his needs while interacting with him, so as to cross sell their products. To manage growth and continuity in business, human resources play an important role. Banks may follow a feedback system to know the customer expectations for improving the level of customer satisfaction to maximum level. Remarks on service reliability should be continuously obtained from customers. This will enhance their service quality to a large extent. This study can also be further extended by analysing the impact of demographic factors and by extending the study to private banks.

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SUSTAINABLE INFRASTRUCTURES OF POST-TENSIONED CONCRETE

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ABSTRACT

It's been a decade since post-tension system began to be applied in earnest to buildings. In the meantime, Post-Tension (PT) system has been used in various buildings as main structural system including tall buildings. Compared to conventional reinforced concrete (RC) floors, PT slabs provide less thickness, fast construction cycle for each floor, durable concrete and, consequently, cost-effective structure. Post-tensioned (PT) concrete floors are used on a large scale in residential and office buildings in North America, Europe, Fareast and Gulf area. Post-tension system plays a role to overcome architectural limit of regular RC tall buildings particularly in the realization of long span with shallower depth than other structural system. The post-tensioned building market has been steadily grown in recent years with such advantage. PT concrete are used on a wide range in bridge structure. Post-Tensioned concrete Institute PTI was founded in 1976. Members of the Institute include major post-tensioning materials fabricators, manufacturers of pre stressing materials and companies supplying materials, services and equipment used in post-tensioned construction. Additionally, members include professional engineers, architects and contractors. Computer model specifically made to design PT slabs satisfying the requirements of the code is introduced. In some cases, It demonstrates an economic alternative to conventional concrete or steel floors.

Keywords : Application Computer model Design Post-tensioning concrete Slabs, Floor structure, Light Weight, Concrete Floors.

1. Introduction

The first application of post-tensioning is believed to have been conceived by Eugene Freyssinet in 1933 for the foundation of a marine terminal in France and the technology was introduced to the United States in the 1950s.

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Post-tensioning now is used extensively in bridges, elevated slabs (parking structures and residential or commercial buildings), residential foundations, walls, and columns. Global increase of nations wealth imposes constant improvement of developed throughout the years and well known architectural forms, both visually and functionally. This forces the necessity to search for slenderer horizontal shell elements with greater spans. However, apart from general stability and capacity, those have to provide both good thermal and acoustical features, as well as vibration resistance, which becomes problematic in case of slender slabs. Despite number of disadvantages, all of the above mentioned factors may be reconciled by concrete, more precisely - prestressed concrete. Quite large span is achieved using pre-tensioned hollow core slabs. However, much more slender slabs can be constructed using post-tensioned concrete. For years, post-tensioned concrete long-span slabs have been used as structural floors in buildings in the USA, Australia, Hong Kong and Singapore. Hereafter, they have been introduced to Europe. In Egypt, PT floors are not used on the same scale as in other countries, which may be attributed to the fact that until year 2001 there was no design code for prestressed concrete. However, it should be mentioned that research in prestressed concrete started in Egypt as early as in 1959.

2. Post Tensioning Techniques

Post tensioning is a technique of pre loading the concrete in a manner which eliminates or reduces the tensile stresses that are induced by the dead and live loads. High strength steel ropes called “strands” inside the metal duct (“tendon”) arranged to pass through the concrete floor . When the concrete is hardened, each set of strands is gripped in the jaws of hydraulic jack and stretched to a pre determined force . Stressing procedure will be fully described in a later chapter with the details. The terms which are mostly used in the post tensioning slab constructions are strands, tendons, anchorages etc. “Anchorage” is a device which locks the strand in order to ease the stressing and cast inside the concrete. This will induce a compressive stress in the concrete and later strand is held permanently by this anchorage.

3. Guidelines and Methods

Post-tensioning systems projects in order to achieve economy, efficiency, quicker construction and lower lifetime cost of the structure. Because Post-Tensioning enhances concrete strength under both compressive and tensile stresses.

Post-tension concrete is a method of reinforcing concrete. This concrete has cable conduits cast into it and that cable is stretched, or tensioned, hydraulically after the concrete has hardened. The tension is transferred to the concrete, helping hold it together even better.

Post-tensioning provides high strength and stability, but looks just like any other concrete slab. While most home projects don't require post-tensioning, it could still be a useful technique for some builders. Guidelines that have been published give recommended values of span to depth ratio of a slab basing it on the type of the structure, imposed load (the load over the self-weight) and permissible deflection. For instance, according to the span to depth ratio for solid continuous slabs of two or more spans in each direction not exceed 42 for floor slabs and 48 for roof slabs. Khan and Williams, beginning with the crack free condition in the cross section of the slab, and basing on the performed calculations give the required depth to span ratio for the various load levels. Generally, the highest span to depth ratios do not exceed the value of 45.

Post-tensioned slabs are constructed using either bonded or unbonded prestressing tendons. Bonded tendons can be achieved by grouting the ducts containing the steel tendons after stressing. Therefore, the prestressing force is transmitted to the concrete by bond along the prestressing steel reinforcement. This introduces compatibility between the prestressing steel and concrete, which means that after bonding any strain experienced by the concrete is experienced by the prestressing steel and vice versa. In unbonded tendons applications, the ducts are left after stressing without grouting and the force is transmitted at the anchorages of the reinforcement. This means that bond is deliberately prevented along the length of the tendon. Thus, concrete strains are not translated directly into similar strains in the prestressing steel. Corrosion protection of the unbonded prestressing steel should be carefully applied to improve the durability of the concrete. Failure of unbonded steel strands at the anchorage zone was monitored as a result of steel corrosion.

Post-tensioning utilizes high-quality high strength steel such that 1 kg of post-tensioning strand may replace 3 or 4 kg of ordinary non-prestressed reinforcement. This can reduce congestion of steel reinforcement in concrete members.

4. Post-Tensioning Institute (PTI)

The Post-Tensioning Institute (PTI) is a not-for-profit trade association committed to advancing the quality, safety, efficiency, profitability, and use of post-tensioning systems. PTI's informative manuals and technical guides provide guidance on the design, construction, maintenance, and repair/rehabilitation of post-tensioned concrete structures. Additionally, PTI strives to ensure that specifiers and purchasers of post-tensioning materials receive products and services that meet a recognized standard of quality through its plant and field personnel certification programs. Members of the Institute include major post-

tensioning companies, as well as more than 500 professional members, engineers, architects, and contractors from around the globe.

4.a PTI- History

PTI was founded in 1976. Members of the Institute include major post-tensioning materials fabricators, manufacturers of prestressing materials and companies supplying materials, services and equipment used in post-tensioned construction. Additionally, members include professional engineers, architects and contractors.

4.b PTI Technical Committees

The Technical Advisory Board reviews and oversees all technical activities of the Institute, including education and certification.

- Barrier Cable
- Bonded Tendon
- Bridges
- Building Design
- Cable-Stayed Bridges
- Grouting
- Rock & Soil Anchors
- Repair, Rehabilitation and Strengthening
- Slab-on-Ground
- Unbonded Tendon

4.c Common Applications for PT

Post-tensioning, or PT, has become increasingly popular over the past 30 years or so as the technology has been perfected. At one time there were problems with corrosion of the cables, especially in deicing-salt-laden parking structures, but better materials and construction methods (plus good training and certification programs) have eliminated most problems.

A recently developed application of PT is external post-tensioning for strengthening of existing structures, especially as an upgrade to resist seismic forces.

Bridge designers have used PT both for cast-in-place concrete and for precast segmental construction. PT allows longer spans and keeps cracks tight.

Concrete water tanks are often post-tensioned to reduce crack width and leakage.

5. Tall Buildings with Post-tension Technology

2.1. Landmark 72 Landmark 72 consists of one 72-story mixed-use tower with the height of 350m and two 48-story residential twin towers. It was completed by Korean general contractor in 2011. Because of the size of typical floor (about 90×50 m), structural system, especially floor system, was a matter of interest to the people involved. Initial plan had interior columns with 7~8 m span, and non prestressed RC was proposed as floor structure . In this case, interior columns bear much larger loads than the exterior columns and the column size had to be about 1.5×1.5 m at lower levels which decreased usable space. Then, the design was changed to have 13 m spans with out interior columns. At this time, choosing a structure system to handle long span became major concern.

6. Bridges with Post-tension Technology

A number of bridges have recently been constructed that employ a moderately thick slab that rests directly on columns without bent caps. Spans are continuous and, typically, 30-m long. Post-tensioning is employed in longitudinal and transverse directions.

While longitudinal post-tensioning is uniformly distributed across the width of the bridge, transverse post-tensioning is employed to reinforce only a small, banded region over each column line. No reinforcing steel is used to tie the columns and the abutments to the slab. Prestressed slab systems that are reinforced for flexure in more than one direction can be analyzed in accordance with the American Association of State Highway and Transportation Officials (AASHTO) specifications and code provisions of the American Concrete Institute (ACI). An equivalent frame method of analysis has been shown to satisfactorily predict factored moments and shears in prestressed slab systems by tests of large structural models.

Tendons required in a design strip may be banded close to the column line in the transverse direction and uniformly distributed in the longitudinal direction. In the transverse direction, ACI calls for at least two tendons to be placed inside the design shear section along the column line. The banded tendon layout has been successful in withstanding ultimate loads in a scale model slab. In the transverse direction, ACI requires a maximum tendon spacing of

six to eight times the thickness of the slab, but not to exceed the spacing that provides a minimum average prestressing of 0.86 MPa.

Even though no tendons are provided between bands in the transverse direction, the majority of the area between bands is subjected to biaxial compression. This biaxial compression assumption is only true for slabs with an aspect ratio (long span to short span) less than two. The approximate amount of prestressing required in each direction is obtained by satisfying the required minimum average compression in the slab and then positioning the vertical profile of each tendon to withstand external moments. Research on time-dependent behavior of concrete box girder bridges indicates that creep and shrinkage play an important role in strain and deflection. Creep causes strains to increase, especially in negative moment zones. Final concrete strains can be 2.5 to 5 times greater than initial strains, which are due to dead and prestressing loads.

7. Advantages of using post-tensioning

- **Minimizes and Controls Cracking:** Post-tensioning will reduce cracking and keep any cracks that might form tight, preventing entry of insects and reducing possible water penetration, which can damage flooring and cause mold problems.
- **Controls deflections:** The strength and added stiffness of a post-tensioned foundation reduces the amount the slab will bend under load.
- **Faster Installation:** With fewer pieces to handle and less concrete to place, a post-tensioned slab can often be installed more quickly than a comparable rebar- or wire mesh-reinforced slab
- **More Reliable:** An engineered solution, post-tensioning is designed to exacting standards and code requirements, has an excellent performance record and offers increased reliability.
- **Economical:** Cost benefits are achieved by reductions in quantities of concrete, steel and excavation, which in turn reduce labor costs. Beams are smaller and slab thickness is less, therefore savings in excavation and site preparation are possible.

Post-tensioning frequently solves design and construction challenges that other construction methods simply cannot. Some key advantages include:

7.a Material savings

- Thinner concrete member sizes; reduction in concrete is approximately 20%
- Rebar in floor elements is reduced by 60% to 75%
- Decreased dead load reduces rebar and concrete in columns and foundations
- Reduction in building height decreases the cost of building cladding, vertical mechanical/service elements, and rebar and concrete in shear walls

7.b Quicker construction

- Potential pour cycle of 3-4 days
- Reduced re-shoring requirements
- Coordination with embeds and MEP openings

7.c Increased performance

- Improved seismic behavior
- Reduced deflection and vibration
- Improved crack control and waterproofing properties—especially beneficial for parking garages and balconies
- Longer spans and fewer columns give greater flexibility in floor layouts in office/residential buildings and better lighting in parking garages which enhances personal safety.

7.d Reduced lifetime costs

- Lower overall maintenance and lifecycle costs of the structure
- Reduced building height also results in energy savings, especially for office buildings
- Potential LEED® credits for Green building design and construction

7.e Other Advantages

- It reduces or eliminates shrinkage cracking-therefore no joints, or fewer joints, are needed
- Cracks that do form are held tightly together
- It allows slabs and other structural members to be thinner
- It allows us to build slabs on expansive or soft soils
- It lets us design longer spans in elevated members, like floors or beams

8. Conventional Concrete Slab Vs. a Post Tension Slab

8.a Strength

Post-tensioned concrete is stronger and more flexible than conventional steel-reinforced concrete. According to the Concrete Network, post-tensioning helps reduce cracking from shrinkage as the concrete dries, and holds together any cracks that do form. Post-tensioning is commonly used in large commercial and industrial projects such as garages and towers.

8.b Size

Conventional concrete slabs are limited in length and thickness. They require a specific level of thickness to maintain their strength – usually at least 4 inches for a slab-on-grade foundation. Long concrete slabs elevated above the ground are limited in length due to the danger of cracking. Post-tensioned concrete can be thinner and longer without risk to its strength or structural integrity, since the cables inside help stabilize it.

8.c Cost

Post-tensioned concrete will usually be more expensive for the home builder, due to the extra equipment needed. However, in large structures, post-tensioning can actually be less costly than conventional concrete slabs. According to the Seattle Daily Journal of Commerce, this is due to the relatively high cost of structural steel, such as rebar. Post-tensioning uses less reinforcing material, allowing it to cost less in large projects.

8.d Complexity

Ordinary concrete slabs require a lot less skill and expertise to pour. Much of the time, you can complete at least part of the work on your own. Pouring post-tensioned concrete is nearly impossible if you're not a professional concrete worker, however, and is best left to experts. Since this material is rarely used in homes, local contractors may not be familiar with it.

Conclusion

When the design of PT slab is done properly against the conventional concrete slab; it can contribute significantly to the economy and aesthetic qualities of the building. As a result, PT floors have found widespread use in office buildings, shopping malls and apartment constructions etc. , PT slabs were for shopping mall and it was mandatory to have a bigger

clear span for the car park and shop area. Therefore it was economical and convenient to design the slabs with post tensioning method in order satisfy the end user's requirement.

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BUDGET CONTROL PROCESS AS A TOOL TO IMPROVE COMPANY'S FISCAL PERFORMANCE: A CASE ON POLARIS FINANCIAL SERVICES.

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ABSTRACT

Budgetary process ensures that organization has optimal allocated funds within which investment programs can be undertaken. This study explores how the efficient budgetary process affects the performance of the organization. Multiple Linear Regression is employed to study the relationship of salient features of budgetary controls, budgetary process and financial performance of the organization. The overall model was also statistically significant, where ($R^2 = .8$, $p < .001$), the adjusted R Square value 0.835, which shows that this model has accounted for 83.5% of the variance in the dependent variable. Human factors within budgetary control had the highest beta coefficient of 0.561 is the most influential factor next to challenges faced in budgetary controls with beta coefficient of 0.510, next to features of budgetary control with a beta coefficient of 0.428 and last influential factor is the process of budgetary controls with a beta coefficient of 0.021. The study recommends sensitization of management and employees of state corporations on the importance of budgetary controls in enhancing financial performance, avoidance of political interference in the budgetary process and use of budgets as tools for management efficiency.

Keywords: *Features of Budgetary Control; Human Factors within Budgetary Control; Budgetary Control Process; Challenges of Budgetary Control Systems; Financial Performance.*

1. INTRODUCTION

The management is efficient if it accomplishes the objectives of the enterprise with minimum effort and most in attain long-range efficiency and systematic approach in facilitate effective management performance is profit planning and control or budgeting. Budgeting is a financial and quantitative statement prepared and approved or to a defined period of time of policy to be pursued during that period purpose of attaining a gaining a given objective it may include income expenditure and employment capital.

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Budgetary control is the system of management control and accounting in which all operations are forecast so as possible planned a head and actual results compared with the forecast and the planned once. This study attempts

- To determine the relationship between salient features of budgetary controls, budgetary process and financial performance in Polaris consulting and services.
- To establish the relationship between human factors within budgetary control and financial performance in Polaris consulting and services.
- To establish the relationship between budgetary control process and financial performance indicators of Polaris consulting and services.
- To determine the relationship between challenges affecting budgetary controls and financial performance of Polaris consulting and services.

2. REVIEW OF LITERATURE

The literature review gives a rationale for development of budget concept, and highlights the importance of budget process in enhancing financial performance within an organization and also illustrates how budget is used as a tool for directing actions to provide focus for organizations, set objectives and undertake performance evaluations.

A study conducted by *Henry C Adams (1985)* reported the social motivation behind government budgeting. *Bartle in 2008* emphasized that without effective budget controls internal and external forces of an enterprise can disrupt firm's efficiency. Findings of *Kenneth Odour Adongo (2013)* conducted in public institutions of Kenya indicates that a positive significant relationship exists between budgetary control and financial performance of state corporations and also recommends sensitization of management and employees of state corporations on the importance of budgetary controls in enhancing financial performance, avoidance of political interference in the budgetary process and use of budgets is viewed as tools for enhancing management efficiency. *Surajkumar (2011)* in his study postulates that the efficiency and utility of the budgetary system depends on the skill and experience of the management as efforts of managers is critical to address the management issues when compared to budgetary system. This encourages the study to focus on human factors within the budgetary control. The feature of a budgetary control is used as a tool for economic management and an instrument of accountability (*Surajkumar, 2005*)

The financial performance of an organization measures the firm's efficiency in utilizing its assets in generating revenue from its primary mode of business (*Powers, 2010*).

Company's total earnings or profit, share value and growth index is used as a tool in measuring the financial performance (*Venice, 2012*). Return on investment, net income as a percentage of sales as well as cost of poor quality as a percentage of sales are used as financial measures of an organization's financial performance (*Needles, 2011*). For the purpose of this study, financial performance was examined through net profit margin/surplus, return on investment and the development index.

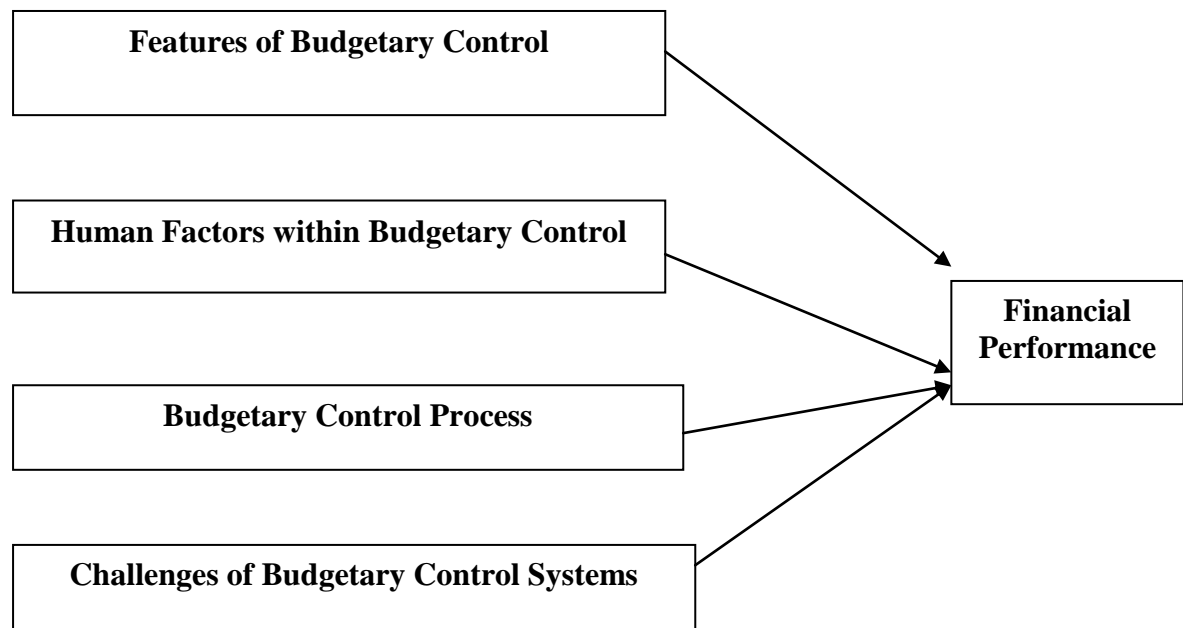


Figure 1: Conceptual Framework

This framework provides a basic perspective of budgetary control as a tool for influencing organizations financial performance. The research study ought to test the framework using a statistical technique.

RESEARCH METHODOLOGY

A descriptive survey design was adapted in the study to examine the effect of budgetary control systems on financial performance of Polaris Financial Services. The primary data was collected through self administered questionnaire from a sample size of 550 employees working at Polaris consulting and services in various locations and secondary data was collected from websites and annual report of Polaris consulting and services. The respondents were selected using convenient sampling method because data are collected based on the availability of employees of finance department in Polaris.

The multiple linear regression analysis was conducted to find, how budgetary control affected financial performance. The respondent's overall mean score on financial performance was considered the dependent variable and budgetary controls the independent variables. Thus mean aggregate scores for respondents' opinion on features of budgetary controls, human factors within budgetary controls, the process of budgetary control and challenges facing budgetary controls were regressed on the overall score for financial performance.

Based on review of literature and considering rational views of the experts in budgetary control and finance the following hypotheses were formulated,

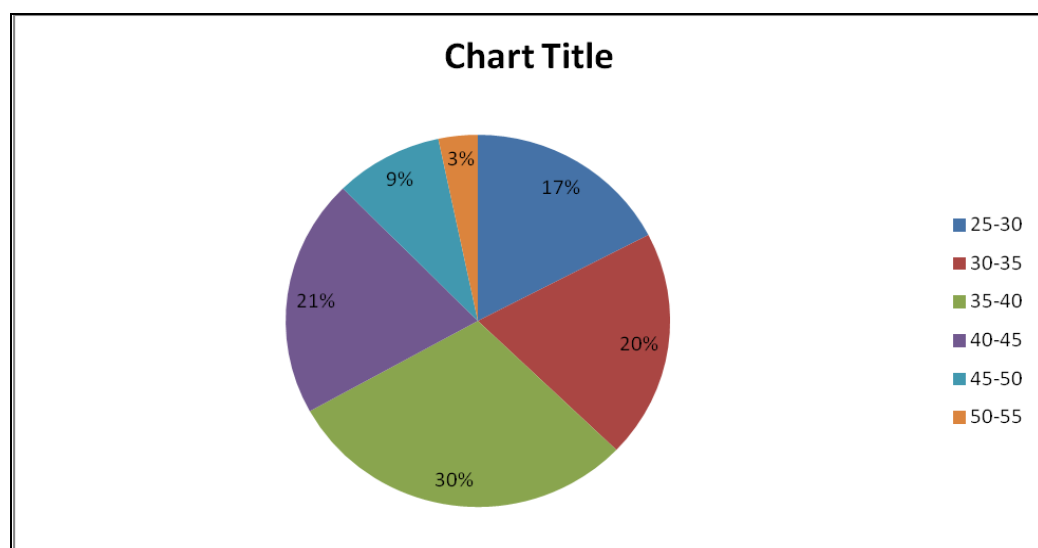
H0: Features of Budgetary Control, Human Factors within Budgetary Control, Budgetary Control Process, and Challenges of Budgetary Control Systems is not significantly contributing to financial performance of Polaris.

H1: Features of Budgetary Control, Human Factors within Budgetary Control, Budgetary Control Process, and Challenges of Budgetary Control Systems is significantly contributing to financial performance of Polaris.

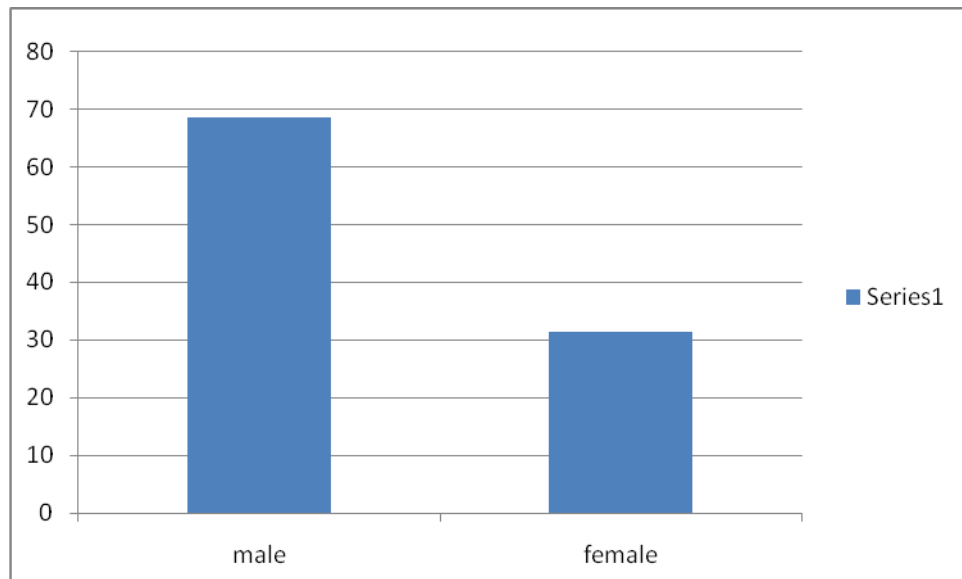
RESULTS AND FINDINGS

Demographic profile of the respondents

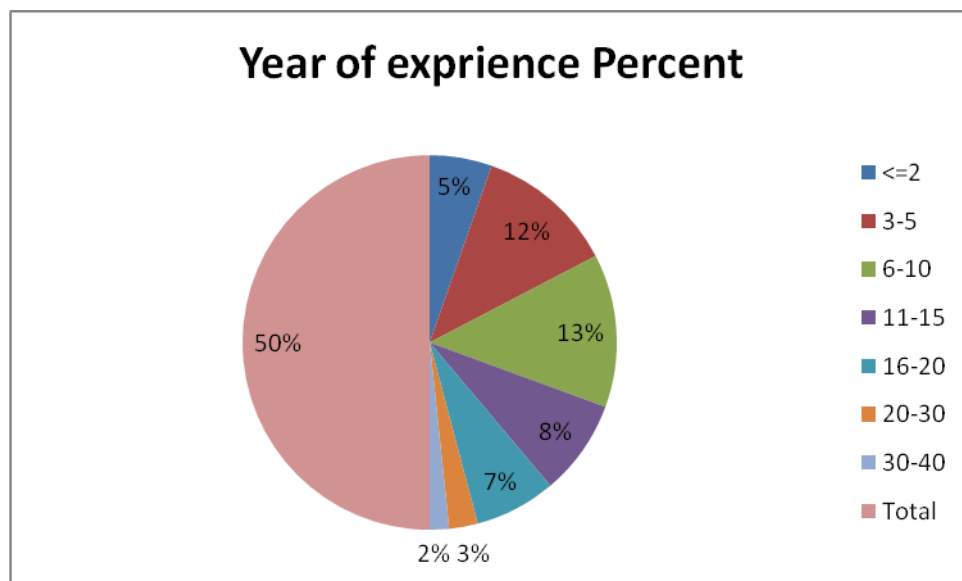
Figure 1 indicates demographic information of the (N=550) respondents at polaris, consisting that 17% of the respondents lie between 25-30, 20% of the respondents between 30-35 then majority 30% lies between 35-40 and aslo 21% of respondents from 40-45, 9% between 45-50 and 3% between the age of 50-55.



The figure indicates that the majority of the respondents were male constituting 68.6% of respondents and 31.4% were female respondents.



As shown in the figure the respondents were classified with the years of experience (5%) where less than 2 years of experience (12%) lies between 3-5 years of experience (13%) between 6-10 years and (8%) between 11-15 years then (7%) lies between 16-20 years of experience (3%) between 20-30 years of experience in the field and (2%) where between 30-40 years of experience .



Hypothesis Testing

H0: Features of Budgetary Control, Human Factors within Budgetary Control, Budgetary Control Process, and Challenges of Budgetary Control Systems is not significantly contributing to financial performance of Polaris.

H1: Features of Budgetary Control, Human Factors within Budgetary Control, Budgetary Control Process, and Challenges of Budgetary Control Systems is significantly contributing to financial performance of Polaris.

The beta coefficients provided the relative importance various budgetary control aspects. The highest beta coefficient value of budgetary control aspect was expected to have highest influence on financial performance, while the second highest beta coefficient stands second in terms of relative significance and so on. The overall model was also statistically significant, where ($R^2 = .835$, $p < .001$), the R Square value 0.835, which shows that this model has accounted for 83.5% of the variance in the dependent variable.

The Regression results are shown in tables below

Table 5

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914 ^a	.835	.830	.19486

a. Predictors: (Constant), features of budgetary control, Human factors within budgetary control, process of budgetary control, challenges facing budgetary control

b. Dependent Variable: Financial performance of State corporations

Table 6

Coefficients				
Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	.038	.128		.294	.769
	human factors	.561	.454	.529	3.294	.001
	features of budgetary	.428	.245	.408	4.593	.001
	challenges in budgetary	.120	.270	-.020	-.2.837	.005
	budgetary process	.021	.024	.033	2.365	.018

Table 6 indicates that 4 independent variables, human factors, features of budgetary challenges in budgetary, budgetary process explain 83.5% of variance of the financial performance of State corporations (dependent variable). The summary table indicates that human factors, features of budgetary challenges in budgetary, budgetary process were good predictors of financial performance of State corporations because R Square value 0.835.

From table 11 the following regression equation can be derived:

$$Y (\text{Financial performance}) = 0.038 + 0.428 (\text{Features of budgetary control}) + 0.561 (\text{Human factors within budgetary control}) + 0.021 (\text{The process of budgetary control}) + 0.510 (\text{Challenges facing budgetary control}) + \epsilon$$

From the Table 11 the F value can be calculated as:

$F(11,134) = 65.055$, $p < .000$. On general aspects within budgetary controls were found to have positive influence on financial performance of the organization. Human factors within budgetary control had the highest beta coefficient of 0.561. Other factors with high influence on financial performance included challenges faced in budgetary controls which reflected a beta coefficient of 0.510, features of budgetary control with a beta coefficient of 0.428 and the process of budgetary controls with a beta coefficient of 0.021.

FINDINGS AND SUGGESTIONS

The findings of the study reveal that majority (68%) of respondents agree on the assertion that managerial commitment to budgetary control has not increased profitability of the organization. Though management of organization can accept the budget, it is not a guaranteed that complete acceptance would lead to profits and thus consequent implication on financial performance. The complete acceptance of budget controls by management has

not led to profits where 56% of respondents were neutral. Furthermore it was noted that the use of budgetary control to pressure employees has led to mismanagement of funds and 38% responded that such a situation could lead to negative financial performance. The 52% of respondents were not sure that using of budgetary controls to achieve organizational goals had led to increased profitability.

It was also noted that 71% respondents were neutral to profitability has been affected by use of budgets to blame employees (i.e.), the profitability of the organization didn't not have a major impact from the employees. There were equal majority of respondents who agreed and were not sure about this assertion and is consistent with the findings of Ghosh (2005) notes that at times management of organizations may be focus too much on technical budgetary aspects which can affects the organizations profitability

5.2 CONCLUSION

This study outlines that there is an increase in the level of sensitization among management and employees of the organization on the importance of budgetary controls in enhancing financial performance. The process of budgetary control should not only consider sector needs in the planning stage but also parameters within implementing organizations in order to facilitate sound financial standing. Budget committee should include all unit/departmental heads, supervisor and sub-heads that have direct control with the organizational activities. This will create a forum for wider participation of all relevant stakeholders in the company's management process, thereby enhancing the exchange of ideas and views about how the operation of the business could be improved.

It is important not to over subject the process of budgetary control to political scrutiny as this may divert the core purposes of a budget. Budgets should not only be used as tool for management and indicators of management, they should also be viewed as practical tools within which organizations should used to enhance their financial goals.

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A STUDY ON COMPETENCY MAPPING FOR CIVIL ENGINEERING CONTRACTORS IN SALEM DISTRICT

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ABSTRACT

A lot is going on in recent times on the issue of competency mapping. A lot of resource is spent and consultants are invited to do competency mapping. Competency mapping is gaining much more importance and organizations are aware of having good human resources or putting the right people on right job. Competency mapping is important and is an essential exercise. Every well managed firm should have well defined roles and list of competencies required to perform each role effectively. Such list should be used for recruitment, performance management, promotions, placements and training needs identification.

In performing or carrying out work, it is essential that the required job skills first be articulated. This information not only helps to identify individuals who have the matching skills for doing the work but also the skills that will enhance the successful performance of the work. Yet often to perform well, it is not enough just to have these skills. It is also critical to complement the skills with the necessary knowledge and attitudes. For e.g. the necessary knowledge will enable an individual to apply the right skills for any work situation that will arise while having the right attitude will motivate him to give his best efforts. These skills, knowledge and attitudes required for the work are usually collectively referred as competencies.

Key words.

competency mapping, recruitment, knowledge and attitudes.

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COMPETENCY

Competency is an underlying characteristic required to perform a given task, activity, or role. Competency has the following forms:

- Knowledge
- Skills
- Attitude

These three factors are important for identifying competency in a person. Different individual requires different competency for e.g. a person working in a manufacturing unit may require different competency than a person working in an IT sector. Competency differs from industry to industry. According to Harvard Business Review Daniel Katz grouped competency into three areas which later expanded in to the following four:

- Technical
- Managerial
- Human
- Conceptual

In competency mapping all details of the behaviors (observable, specific, measurable etc) to be shown by the person occupying that role are specified.

COMPETENCY MAPPING

“Competency mapping is a process that an individual uses to identify and describe competency that are most critical to success in a work situation or whole role”.

Competency mapping is a process of identifying the key Competencies for an organization or a job and incorporating those Competencies through out the various processes (i.e. job evaluation, training, recruitment) of the organization. It is about identifying behavior and personal skills which distinguish excellent and outstanding performance from the average.

Competency only describes what has to be done, not how. So the competencies might describe the duties of a Sales Manager, for example, manage the sale office and its staff, prepared quotation and sale order processing, manage key Accounts and supervise and motivate the field sale force.

The Competencies which might determine excellent in this role could include problem solving and judgment; Drive and Determination; Commercial Awareness further interpersonal skills etc, all of which might be described further by Behavioral Indicators relating specifically to that post in that organization.

Competency mapping is an important technique being followed in the industries to ascertain the employee's knowledge & skill and utilized them effectively. For any job, a defined competency is required to perform the task effectively. If the employee is meeting the required

skills, then he is competent enough to carry out the task. If there is a gap between the required and available skill then proper training will be given to bridge the gap.

Who Identifies Competencies?

Competencies can be identified by one of the following category of people:

- Experts
- HR Specialists
- Job analysts
- Psychologists
- Industrial Engineers

What Methodology is used?

The following methods are used in combination for competency mapping:

- Group work
- Task Forces
- Task Analysis workshops
- Questionnaire
- Use of Job descriptions
- Performance Appraisal Formats etc.

How to Identify Competency

The process of identification is not very complex. Some of the methods are given below:

Simply ask each person who is currently performing the role to list the tasks to be performed by him one by one, and identify the knowledge, attitudes and skills required to perform each of these jobs. Consolidate the list and present it to a role set group or a special task force constituted for that role.

1. Appoint a task force for each role.

Who can do competency mapping

Competency mapping is a task which can be done by many people. Now days all Management schools and those specializing in HR train the students in competency mapping. Any Masters in Management or Social Sciences or an Employee with Equivalent Experience and training can develop these competencies.

Need of Competencies for the Individual Employee:

The list of compelling reasons includes, at a minimum, the following individual:

- ❖ Gains a clear sense of true market ability in today's job market in key position of interest.
- ❖ Project and appearance as a "Cutting-Edge" and well-prepared candidate, who has taken the time to learn about Competencies, investigate those in demand, and map his/her, own competencies prior to interviewing.
- ❖ Demonstrating self-confidence that comes from knowing ones competitive advantages more convincingly, and from being able to articulate those advantages in specific language.
- ❖ Secures essential input to resume development – a set of important terms to used in describe expertise derived from prior career experience
- ❖ Gains advantage preparation for interviews, many of which may be delivered using a competency – based approach called "structured behavior interviewing" or "behavioral even interviewing.
- ❖ Develops the capability to compare one's actual competencies to an organization or position's required/ preferred competencies, in order to create an individual Development Plan.

OBJECTIVES OF THE STUDY

- To identify the core competencies required for the Civil Engineering contractors.
- To measure the relationship existing between the socio economic characteristics of the Civil Engineering contractors and the competencies possessed by them.

NEED OF THE STUDY

- Competency Mapping is a process of identifying key competencies for an organization or for a particular position in an organization.
- For the use of those competencies throughout the various processes (i.e. job evaluation, training, recruitment, training and development, performance management, succession planning etc.) of the organization.
- CM Plays a very important role in the recruitment & retention process. Through CM organization can make an accurate analysis about the difference between the job requirement and candidate's capability for doing that job & the training needed to fill that gap.
- It analyses attributes of a person for doing job successfully like Knowledge, Skills, Attitude, Motive, Self Concept etc.
- Performance wise experience of the respondents:
- The Table No.6.1.5 describes the performance wise distribution of the respondents based on their experience in this field. It is classified as <1 year, 1-4 years, 4-6 year, 6-9 years, 9- 19 years and + 20 years.

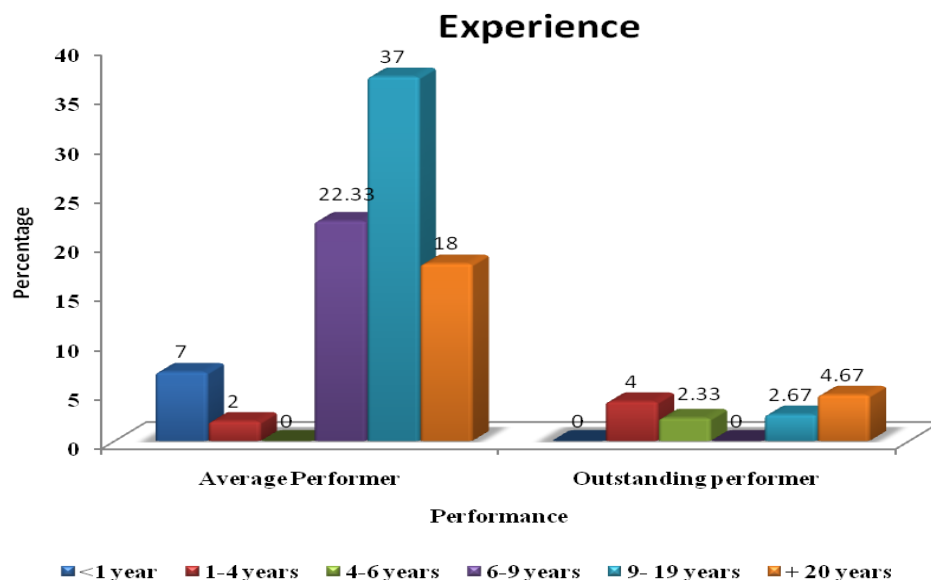
Performance wise experience of the respondents

Experience (yr)	Performance				Total	
	Average Performer		Outstanding performer		F	%
	F	%	F	%		
<1 year	21	7.00			21	7.00
1-4 years	6	2.00	12	4.00	18	6.00
4-6 years			7	2.33	7	2.33
6-9 years	67	22.33			67	22.33
9- 19 years	111	37.00	8	2.67	119	39.67
+ 20 years	54	18.00	14	4.67	68	22.67

Total	259	86.33	41	13.67	300	100
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- It is understood from the above table, that in the average performer group, 7 percent of the respondents have an experience of less than a year, 2 percent of them have an experience of 1-4 years, 0 percent of them have an experience of 4-6 year, 22.33 percent of them have an experience of 6-9 years, 37 percent of them have an experience of 9- 19 years and 18 percent of them have an experience of + 20 years.
- In the outstanding performer group, 0 percent of the respondents have an experience of less than a year, 4 percent of them have an experience of 1-4 years, 2.33 percent of them have an experience of 4-6 year, 0 percent of them have an experience of 6-9 years, 2.67 percent of them have an experience of 9- 19 years and 4.67 percent of them have an experience of more than 20 years.
- This shows that more than 20 years of experienced persons and those with an experience between 1-4 years are performing well. The research can conclude that the person with high experience and the budding stage contractors were performing well when compared to others.

Performance wise experience of the respondent



FINDINGS

Demographic characteristics of the outstanding civil engineering contractors

- It is found out from the analysis that the diploma holders are performing well when compared to others

- It can be noticed from the analysis that the maximum number of outstanding performers are from the experience group of above 20 years and 1-4 years.
- It can be divulged that the contractors who are working in both the corporation and the village perform well when compared to the contractors who are working in the village alone.
- It is found out from the analysis that maximum numbers of respondents do this contractor work in full time permanent role.

SUGGESTIONS

- Specialized trainings such as technology based training can be given to the technical employees.
- Promotion and training needed by the employee can be made better.
- Up to certain level transparency can be maintained in top level decision making and the employees should be involved in decision making.
- Employees are quite satisfied about the training programs given but a considerable number of respondents requested to increase the number and duration of training programs.
- Training programs may include external training with group discussion and interactive sessions, which enable the participants to maintain a better understanding and communication with their superiors.
- Employees feel that conducive work environment should be created and they should be motivated to innovate new ideas and develop their skills.
- Employees have stated that promotion should be made either on seniority basis or on performance basis or through competency assessment.
- The management should create awareness about the importance of the competencies among the employees.

CONCLUSION

- Competency mapping helps to increase the employee skills in the organization, competency leads to demonstration of skill and abilities, which results in effective performance within an occupational area.
- Competency mapping is a process that helps in identifying and mapping the competencies, required for the successful performance in a particular role.

- Thus competency mapping is an assessment that has gained paramount importance in organization, for the people to develop their strategies, knowledge, skills and abilities in order to enhance the organizational growth and objectives and to maximize the utilization of human potential.

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ECONOMIC EMPOWERMENT OF WOMEN ENTREPRENEURS WITH SPECIAL REFERENCE THROUGH MICRO ENTERPRISES

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ABSTRACT :

Micro enterprises aim at developing and utilizing the entrepreneurial talent and potential of rural women below poverty line to meet the local needs. Survival and growth of these enterprises are essential for the beneficiaries/entrepreneurs as they ensure better standards of living and thereby their individual, family and social empowerment. This study, beyond any shadow of doubt, has revealed that these enterprises have succeeded in the socio-economic empowerment of rural poor. The findings of the study supports the hypothesis of the development of micro enterprises has had an impact on women empowerment.

KEYWORDS :

Women Empowerment, Micro enterprises, Economic empowerment.

INTRODUCTION :

In India, plans and policies as well as the constitution have laid stress on women empowerment. Empowerment provides legitimacy and social justice for human development. Empowerment of women means creating economic independence, self reliance, political, social and legal awareness, self confidence and positive attitude among women. It enables women to face any situation and to participate in the development activities of the nation. The development of micro entrepreneurs women are seen as appropriate way to assault poverty at the grass-root level by generating employment and income (Ghosh, 1998).

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Though nearly half of Indian population consists of women, their participation rate in the economic activities is only 34%. During the 1970's efforts to promote self-employment among women started receiving greater attention from the government and private agencies.

The result has been the emergence of women entrepreneurs on the economic scene in recent years. Even then, less than 5% of business units are owned and operated by them. Several studies have shown that women have proved to be good at business. Some studies have identified the problems of women entrepreneurs, among them Choudhary and Sharma (2008), revealed that nearly 90 percent of the rural enterprises faced problem of lack of capital. Mathew (1998) expressed that the women entrepreneurs failed to get appropriate support from banking system in Kerala. Balasubramanya (1995) observed that irrespective of size, purchasing raw material is the major bottleneck. This paper is an attempt to examine the role of micro enterprises in empowering the women of Tamil Nadu. For this, the rest of the paper is divided into two. The first part briefly explains the concept of micro enterprises and the methodology. The second part analyses the socio economic background of entrepreneurs and measures the extent of women empowerment achieved through the formation of micro enterprises in Tamil Nadu.

MICRO ENTERPRISES:

The origin and growth of micro enterprises can be tracked to lack of employment opportunities and inadequate income generation. To address the issue of poverty reduction, create employment and income opportunities, government has initiated micro enterprise development opportunities. Micro enterprises are small undertakings run by individuals or groups who take up the responsibility of managing the business and the family. These enterprises are based on certain characteristics like low capital, low technology, low risk, and a few workers. They are coming into existence out of either market driven or non market driven forces. Market driven enterprises are managed and controlled by the entrepreneurs themselves. Government agency or NGOs play an active role in promotion of non market driven enterprises. Self help groups (SHGs), Swarnjayanti Gram Swarozgar Yojana (SGSY) etc. fall under this category. This study considers non market driven micro enterprises promoted by government agencies as they dominate the micro enterprise sector in Tamil Nadu. The main objectives of initiating non market driven micro enterprises fostered by government is to help the beneficiaries to take up and manage their own business activities which could bring about economic awareness and empowerment among the women members. The idea of starting micro enterprises has raised lot of hopes and expectations, particularly among women below poverty line. The SHGs have emerged as a vibrant micro

finance movement in India with active support from government, voluntary agencies and banks. With the launching of SGSY scheme and other similar schemes of state governments, the flow of credit to the SHGs has significantly increased. The main aim of these schemes is to assure sustainable income to the poor through self employment by promoting micro enterprises. This paper is an attempt to assess the extent of empowerment achieved by women beneficiaries of micro enterprises linked with SHGs. As majority of the micro enterprises linked with SHGs are formed as group enterprise. Micro enterprises formed as group enterprises are taken for the study. Data were collected from a total of 20 group micro enterprises in Tamil Nadu and their 150 beneficiaries at random. The methodology adopted comprises simple techniques/tools like: percentage, paired' test and empowerment index.

MEASURING EMPOWERMENT:

An attempt is made to measure empowerment in the following aspects:

. Economic empowerment

. Social empowerment

. Family empowerment

. Individual empowerment

ECONOMIC EMPOWERMENT

All the sample entrepreneurs are first generation entrepreneurs and only 40 (26.7%) entrepreneurs have previous experience in the same line of business activity. It is found that maximum of entrepreneurs (46 %) fall under the age group of 35-55.

TABLE 1: INCOME OF THE FAMILY BEFORE AND AFTER BECOMING A BENEFICIARY/ENTREPRENEUR

Monthly income of the family (in Rs.)	Number of Beneficiaries/Entrepreneur	
	Before becoming a member	After becoming a member
1. Nil	46 (30.7)	--
2. Less than 500	73 (48.7)	--
3. 500-1000	23 (15.3)	32 (21.3)

4. 1000-2000	8 (5.3)	55 (36.7)
5. Above 2000	--	63 (42.0)
Total	150 (100.0)	150 (100.0)

MONTHLY INCOME OF THE FAMILY

Monthly income and expenditure are the two important factors, which decide the standard of living and saving behavior of the people. A comparison was made between the monthly income before and after becoming a member of the unit. Table 1 presents the monthly income of the family before and after becoming beneficiary of the unit. The table shows that before becoming a member of the unit, 30.7% families had no income, 48.7% had less than Rs.500, 15.3% had between Rs.500 to Rs.1000 and 5.3% had between Rs.1000 to Rs.2000. This implies that majority of the families had income below Rs.500 and the lowest number of families had income above Rs.1000. no family had income above Rs.2000. After becoming a member of the unit, all the families are earning more than Rs. 500 per month. 21.3% have income between Rs.500 to Rs.1000 and 36.7% have between Rs.1000 to Rs.2000 percentage of families having income above Rs.2000 has increased from zero to 42%. After becoming the member of the unit highest percentage of the families are in the income group of above Rs.2000 whereas before becoming a member of the unit the highest percentage of families was in the income group of less than Rs.500.

TABLE 2: VALUE OF HOUSEHOLD ASSETS OWNED BY ENTREPRENEURS

Value of household assets (in Rs.)	Number of Beneficiaries/Entrepreneur	
	Before becoming a member	After becoming a member
1. Less than 25,000	71 (47.3)	50 (33.3)
2. 25,000-75000	75 (50.0)	91 (60.7)
3. 75,000-1,25,000	4 (2.7)	9 (6.0)
Total	150 (100.0)	150 (100.0)

(Figures within brackets are percentages of total)

Table 2 presents the assets owned by entrepreneurs before and after becoming a member of micro enterprise. Assets include radio, tape-recorders, T. V., fridge, sewing machines, telephones etc. Before becoming a member, 50.0% of beneficiaries possessed assets worth Rs.25, 000 to Rs.75, 000. 47.3% owed assets worth less than Rs.25,000 and only 2.7% owned above Rs.75,000. After becoming entrepreneurs, considerable change occurred in the value of assets owned by the members. Majority of beneficiaries own assets worth Rs.25,000 to Rs.75000 (60.7%) followed by assets worth less than Rs.25000 (33.3%) and by assets worth Rs.75000. None of the beneficiaries own assets above Rs.125000 before and after becoming a member.

SOCIAL EMPOWERMENT

The ability to speak in public, the courage to raise voice against social injustice, knowledgeable about the laws to protect and defend women etc., influence the position of women in the society. An attempt is made to analyze the extent of social of social empowerment achieved by entrepreneurs of micro enterprises. In order to measure the degree of empowerment, 7 variables were identified (Table 3). The analysis reveals that for all variables the average score ranging from 0.95 to 1.30. Since the average score for the entire group was 1.09 one can infer that the degree of social empowerment achieved by beneficiaries was moderate.

Since the average score for all the variables was moderate, the highest average score (1.30) was earned by the variable ‘express your opinion in a meeting or ‘discussion’ and the lowest (0.95) by two variables, viz, ‘utilize the opportunity to contest in elections’ and travel alone even at night’.

TABLE 3: LEVEL OF SOCIAL EMPOWERMENT

Variables	No. of beneficiaries			Scores	
	‘Yes’	To some extent’	No’	Total	Average
1.Public speaking ability	44	72	34	160	1.07

2.Participation in election campaigning	60	57	33	177	1.08
3.Utilise the opportunity to contest in elections	37	69	44	143	0.95
4. Express your own opinion in a meeting	69	57	24	195	1.30
5. Raise voice against in justice	48	78	24	174	1.16
6.Knowledge about the laws to protect and defend women	39	75	36	153	1.02
7. Travel alone even at night	40	63	47	143	0.95
Total				1145	1.09

FAMILY EMPOWERMENT

Extent of power of decision making in the family, freedom in spending, freedom to attend social functions etc. determine the position of women in the family.

From this point of view, it is realistic to take a look at some selected variables. These variables include areas related to freedom to spend, decide mode of savings, operate bank accounts, and attend social functions and power to make important decisions in the family. Table 5 sheds light on the result of analysis

TABLE 4: FAMILY EMPOWERMENT

Variables	No. of beneficiaries			Scores	
	‘ “Yes’	To some extent’	No’	Total	Average
1.Freedom to spend earnings	61	60	29	182	1.21
2.Freedom to decide mode of savings	69	53	28	191	1.27

3.Freedom to operate Bank Accounts	65	33	52	163	1.08
4. Freedom to attend social functions	95	41	14	231	1.54
5. Freedom to take decisions relating to education of children	62	60	28	184	1.22
6. Decisions relating to the purchase of costly capital assests	60	57	33	177	1.18
Total				1128	1.07

There is wide variation in the average score registered in 6 variables ranging from 1.08 to 1.54. Hence the degree of empowerment was moderate for all variables except one. 'Freedom to attend social functions' is the area of variables in respect of which degree of empowerment was high. The average score of all the variables taken together was only 1.07 and therefore the extent of empowerment achieved by the beneficiaries in their family was moderate.

INDIVIDUAL EMPOWERMENT

TABLE 5: INDIVIDUAL EMPOWERMENT

Variables	No. of beneficiaries			Scores	
	' 'Yes'	To some extent'	No'	Total	Average
1.Enhanced knowledge of enterprises	90	23	37	203	1.35
2. Confidence to start own enterprises	54	40	56	148	0.99
3.Helped in personality development	109	26	15	244	1.63
4.Better self awareness	103	38	9	244	1.63
5. Leaderships Quality	96	39	15	231	1.54
6. Ability to face problems	105	31	14	241	1.61.
Total				1530	1.46

The table shows that average score of five variables are more than the average score of all the variables taken together (1.46). Among the seven variables the degree of empowerment was low for the variable ‘confidence to start own enterprises’. Discussion with the respondents reveals that before becoming a member, they had no knowledge about how to conduct a business. Similarly, since the respondents are from below poverty line (BPL) families, they are not financially sound and therefore many of them have no confidence to start their own enterprises. The average score among the variables varies between 0.99 and 1.63.

The total average score of the entire variables was 1.5 and hence it can be concluded that individual empowerment through micro enterprises was high.

CONCLUSION

Micro enterprises aim at developing and utilizing the entrepreneurial talent and potential of rural women below poverty line to meet the local needs. Survival and growth of these enterprises are essential for the beneficiaries/entrepreneurs as they ensure better standards of living and thereby their individuals, family and their social empowerment. This study beyond any shadow of doubt has revealed that the enterprises have succeeded in the socio economic empowerment of rural poor. But the basic objective of eradicating poverty is yet to be realized. Despite impressive contributions micro enterprises face problems. As the survival and growth of these enterprises are essential, commercial efficacy should be accorded priority. The findings of the study supports the hypothesis of the development of micro enterprises has had an impact on women empowerment.

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**A STUDY ON CONSUMER'S PREFERENCE TOWARDS PRODUCT FEATURES:
WITH REFERENCE TO WHITE DURABLE GOODS**

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ABSTRACT:

This study pertains to find the consumers preference before the purchase of white durable goods such as Refrigerator, Air Conditioner and Washing Machine. Consumers play an important role in purchase decision, it is difficult task to understand the consumer's choice in any purchase and they rank the product and services according the benefit they attain. In this study the researcher focus towards the product features like Innovation, after sales service, imported product, additional features / special features, Utility, Technical service, Electricity usage, Latest technology, Star rating, Brand name, Noise, Size / capacity / space etc., to find the customers preference. The researcher has used statistical techniques such as percentage analysis and t-test to reach the conclusion. Demographical factors such as age, education, income and family structure also plays a key role in selecting the product and services.

Keywords: Consumer preference, consumer behaviour, product preference and white durable goods.

INTRODUCTION:

Consumer durable goods are those which can be used continuously for more than three years. The consumer durable goods can be classified into white goods, brown goods and electronic goods. The white goods such as AC, Refrigerator and Washing machine have a large number of players such as O general, BPL, Videocon, Blue Star, LG, Samsung, Whirlpool, etc. Product features is an important variable which influence consumers decision towards the purchase of durable goods.

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The current study intended to find the consumers preference with regards to the product feature such as durability, size, colour, star rating etc.; Consumers generally prefer branded products, reliable price with additional features while purchasing durable goods.

The consumer durable industry is growing at a rapid of 11% compound annual growth rate (CAGR) in the fiscal year 2012 – 17 and it is forecasted that it will double in the next 5 years. Innovation, additional features are the positive aspects that will increase the sale in upcoming year for durable goods. Like taste of the consumer changes often the preference towards the product also changes, once perceived as luxurious now perceived as necessity. The technological development, increase in household income created a great demand for white durable goods. Consumers can easily compare the product and services offered by the leading players through technological development. Generally consumers search for products which have a lot of features and at affordable price. Product features play an important role in deciding the purchase of goods and services. Preference can be stimulated by the features. Preference had the tendency of limiting the choice; however preference is different from choice. Choice is an action oriented and preference is a mind oriented.

REVIEW OF LITERATURE:

The study aim to find out the consumers preference towards products feature like innovation, after sales service, electricity usage, star rating etc., In this framework several literature on consumer preference and product features are studied.

Annam (2008) conducted a survey towards rural consumers in term decision of pre and post purchase. Researcher analyzed the influence of media towards brand awareness with respect to demographic profile. Researcher has taken white durable goods and durable goods such as computer, microwave oven, vacuum cleaner for the study. 200 rural customers were taken as sample size, and the researcher studies about pre purchase, purchase and post purchase variable. The study finally concluded that joint decision by family members are influenced more.

Janaki and Premila (2012) conducted a study on “customer involvement in purchase of home appliances”. The aims of the study were to know the purchase decision of consumers towards home appliances and to measure the consumer’s involvement towards purchase.

A total sample of 200 customers was taken for study within Coimbatore city. Researcher used random sampling method, Percentage analysis, Weighted Average, ANOVA, and Factor Analysis were the tools used by the researcher. The researcher concluded that consumer's involvement leads to attitude which in turn increases brand loyalty.

Subhadeep Chakraborty (2016) carried out a study on "Brand preference of consumers towards selected consumer durables: a case study of Tinsukia town". The researcher conducted the study with the aim of understanding consumers brand preference and factors that influence brand preference. 371 households from Tinsukia town were taken for study, researcher used quota sampling technique. Percentage analysis and chi square test were used for the study. The researcher concluded that factors like cost, brand, after sales service influence brand preference. The study also depicted that customers are satisfied and loyal towards the brand they are currently using.

STATEMENT OF PROBLEM:

Understanding consumers' preference regarding the purchase of goods and services is not an easy task. The task becomes difficult in case of selecting products based on its features. Existing literature shows that an additional feature influences the consumers to buy the product. In this article an initiative is taken to study the consumer's preference towards product features. White goods such as air conditioner, refrigerator and washing machine were taken for the study.

OBJECTIVES:

The following are the objectives of the study:

- To understand the demographic profile of the consumers using white goods.
- To find out the consumers preference towards additional features towards white goods.

METHODOLOGY:

The study is conducted to know the product preference based on the additional features available in the product. The White durable goods such as Washing Machine, Refrigerator and Air conditioner were taken up for the study. Samples of 50 customers within Chennai city were taken for the study. Questionnaire method was used to collect the primary data. Percentage analysis and t-test were used to interpret the data.

LIMITATION OF THE STUDY:

The study is limited and restricted only to 50 respondents in Chennai district. It is also restricted to the users of white durable goods. So, generalization of the conclusion is not universally applicable. Consumer's preference varies from one person to another, additional features of the product can be preferred by some customers but some customers prefer price and quality as the centric point. Consumer's preference can be studies at various levels.

ANALYSIS AND INTERPRETATION OF DATA:

Tables are shown to analyze the demographic profile of the respondents.

Table: 1 Results of Frequency Distribution with respect to **AGE** (N=50)

	Frequency	Percent	Valid Percent
Below 25	13	26.0	26.0
25-34	30	60.0	60.0
35-44	7	14.0	14.0
Total	50	100.0	100.0

Source: Primary Data

Table 1 represent that 60% of the respondent are between 25-34 years of age, 26% are below 25 years of age and 14 % are between 35 – 44 years of age.

Table: 2 Results of Frequency Distribution with respect to **GENDER** (N=50)

	Frequency	Percent	Valid Percent
Male	12	24.0	24.0
Female	38	76.0	76.0
Total	50	100.0	100.0

Source: Primary Data

Table 2 represents the gender of the respondent, where 76 % are female and 24 % are male.

Table 3 Results of Frequency Distribution with respect to **EDUCATIONAL QUALIFICATION** (N=50)

	Frequency	Percent	Valid Percent
School Level	1	2.0	2.0
Graduate	15	30.0	30.0
Post Graduate	19	38.0	38.0

Professional Course	13	26.0	26.0
Others	2	4.0	4.0
Total	50	100.0	100.0

Source: Primary Data

Table 3 represent the educational qualification of the respondent, where 38% are post graduate, 30 % are graduate, 26 % are professionally qualified, 4% come under other category and 2% are at school level education.

Table: 4 Results of Frequency Distribution with respect to **OCCUPATION** (N=50)

	Frequency	Percent	Valid Percent
Government / Public Sector	3	6.0	6.0
Private Sector	33	66.0	66.0
Own Business	1	2.0	2.0
Professional	6	12.0	12.0
Others	7	14.0	14.0
Total	50	100.0	100.0

Source: Primary Data

Table 4 represent the occupation of the respondent, where 66% work in private sector, 14% work in other sector, 12% are professionally occupied, 6% work in government / public sector and 2% have their own business.

Table: 5 Results of Frequency Distribution with respect to **INCOME** (N=50)

	Frequency	Percent	Valid Percent
Below 25000	16	32.0	32.0
25000-50000	24	48.0	48.0
50000-75000	6	12.0	12.0
Above 75000	4	8.0	8.0
Total	50	100.0	100.0

Table 5 represent the income of the respondent, where 48% earn between 25000 -5000, 32% earn below 25000, 12% earn 5000-75000 and 8% of the respondents earn above 75000.

t - Test

Table: 6 Results of t-test with respect to **CONSUMER PREFERENCE** (N=50)

One-Sample Statistics						
	N	Mean	Std. Deviation	Std. Error Mean	t	P Value
Innovation	50	4.16	.912	.129	32.268	.000
After sales service	50	4.00	1.125	.159	25.145	.000
Imported product	50	3.10	1.093	.155	20.062	.000
Additional features / special features	50	4.08	.922	.130	31.281	.000
Utility	50	4.28	.948	.134	31.908	.000
Technical service	50	4.20	1.030	.146	28.829	.000
Electricity usage	50	4.10	1.055	.149	27.490	.000
Latest technology	50	4.16	1.017	.144	28.913	.000
Star rating	50	4.20	.969	.137	30.652	.000
Brand name	50	4.32	.935	.132	32.654	.000
Noise	50	3.66	1.154	.163	22.432	.000
Size / capacity / space	50	4.00	1.088	.154	25.997	.000
Quality assurance	50	4.48	.953	.135	33.249	.000
Price	50	4.08	1.027	.145	28.092	.000
Warranty period	50	4.36	.875	.124	35.232	.000
Colour availability / Appearance	50	4.04	1.029	.146	27.752	.000
Availability of spare parts	50	4.40	.926	.131	33.606	.000

Source: Primary Data

From the above table it is inferred that respondents prefer additional features while purchasing white durable goods. They highly prefer ‘warranty period’ to be attached while purchasing the product, they also prefer technical service, latest technology, quality assurance, utility, additional features and innovation. They like colour availability, price, size, latest technology and after sales service. The respondents give less preference to imported goods and noise in machine, as they don’t do much in their purchase decision.

FINDINGS:

The study highlights on the following aspects:

1. The study reveals that most of the respondents prefer that the product should have warranty period.
2. Special features, innovation, utility and brand name are the other features they like from the product.
3. Respondents show less preference towards imported goods, colour availability, noise, etc.,
4. In the study most of the respondents possess post graduate as their qualification. 66% of the respondents work in private sector.
5. There is no significant relationship between income and purchase of white durable goods.
6. 60 % of the respondents come under the age 25 – 35. There is no age barrier in using the durable goods and purchase of it therefore.

CONCLUSION:

The aim of this study is to understand the consumer's preference before the purchase of white durable goods. Consumer durable industry is the fast growing industry all over the world. Due to technological development and raise in income of the individuals, consumers prefer white goods for their day today life. Globalization have influenced many new company to enter into market, many brands are available at different range of price to the consumers. Consumers have the wide range of products to be chosen from the market. Whenever new product is introduced in the market, it contains many additional features compared to the previous product. Marketers use 'buy back' method to sell the same company product to the customers, they get the old product at an acceptable price and sell the new product to the customers. The study reveals that additional features are most preferred by the customer while purchasing the product. It is also important to the marketers to know which feature is preferred most by the customer, so that they can concentrate on the product feature while designing new product.

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CUSTOMER ANALYTICS ON TELECOM MOBILE

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ABSTRACT:

The mobile telecom market persists to grow at a hectic pace, driven particularly by the rapid penetration of mobile services with an acute increase in churn rate and disloyalty especially on the youth market. To face this operational challenge it is highly essential to exploit customer behavioural data to identify unique and actionable factors influencing the purchasing decision and customer loyalty. Thus this research mainly targets customer loyalty in Telecom Industry constructive study on the behavior of the regular repeat customers .The purpose of this paper is to find out what kinds of specific and concrete operational factors have an important impact on Indian mobile telecom customer loyalty.

Key words: customer analytics; customer satisfaction; perceived quality; customer value; switching cost; corporate image, Indian Mobile Industry, Telecom analytics, Customer value, customer lifecycle analysis, Churn management, Market Basket analysis.

Introduction

The Indian telecommunications Industry is one of the fastest proliferating sector in the World and India is projected to bench the second largest telecom market globally by 2018. Indicators are clearly representing the increased competition and that induced the customers to hop for low cost options. This in turn entangled with disloyalty and as the industry saturates, it become imperative for the mobile operators to shift their focus from rapid acquisition strategies to strategies which helps to maintain and enhance margins from existing customer base.

Impact of the problem

Though many service industries are affected by the churn phenomenon the problem is extremely acute in the telecom industry, with customers joining and quitting in short periods. According to research firm Gartner, India's churn rate is anywhere between 3.5 percent to 6 percent per month, one of the highest in the Asia-Pacific region.

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Customer loyalty and its significance

Research is all about Customer loyalty on Indian cellular market, is a process by which data from customer behaviour is aggregated and analysed to gather the purpose and factors influencing them to be loyal in their purchasing pattern. Recent statistics depicts very high churn in this Industry, is mainly rooted by the Youth segment Hence this study of customer loyalty is mainly focusing on Youth segment to lead not only to better and more productive customer relations in terms of sales and service but also to improvement in supply chain management (lower inventory and speedier delivery) and thus lower costs and more competitive pricing.

It facilitates to assess the Customer profitability index and Customer lifecycle, Customer loyalty enables an operator to gain a better understanding of the variables that influence customer churn. It enables the Telco to understand which customer is likely to leave and why, which in turn can help the company take the necessary measures to counter it.

Subject Area:

Customer loyalty can be determined through the customer profile, level of satisfaction, and their buying behaviour with regard to Indian mobile telecom providers.

Research Methodology

Research problem:

Indian mobile telecommunication is facing very high churn and disloyalty in the market inspite of its tremendous growth. It is highly critical to analyze the factors influencing customer loyalty and their level of satisfaction on the cellular providers.

Research purpose

The purpose of this research is to determine customer loyalty by identifying the operational factors that are influencing customer buying behavior, level of satisfaction with regard to Indian Mobile telecommunications.

Research Objective:-

Recent trend line shows the growth and prospects of youth marketing and especially in the field of Telecommunications, they are marking tremendous development. At the same time indicators are highlighting very high churn rate in this segment.

Hence this Research focuses on Youth segment and Research objectives are listed below.

1. To identify the factors influencing the customer loyalty with respect to Indian mobile telecommunications.
2. To determine the level of customer satisfaction with regard to their perceived product quality, services and values.

Research Design:

Research design adopted for this study is “Explanatory” type of research.

Data collection:

The research work is in need of first hand information and also secondary information so as to assess the changes happening in customer satisfaction.. So Primary and Secondary data are collected for this survey.

Primary Data:

Survey method was adopted for collecting the primary data. As mentioned above in the research objective, youth segment falling under the age group of 18 to 34 are selected as the respondents for the research. Questionnaire was designed in the structured objective pattern focusing on the Research objectives.

Secondary Data:

The secondary data had been collected from the previous Research findings, scholarly reports, telecommunication reports, respective marketing departments and through the different sources of literature such as journals, articles etc.

Sampling plan: Simple Random sampling has been adopted by the researcher.

Sample size:

For academic and effective result, the targeted customer base of 200, falling under the age group of 18 to 34 is selected for sampling.

Pilot study:

The questionnaires were distributed randomly to 30 of the samples.

Process of data analysis

In order to analyze all the data collected, SPSS 22.0 and Excel were used for statistical analysis to find out the relationship between the customer loyalty and our data.

List of Variables taken for the Data Analysis:

Totally **10** Dependent variables and **13** Independent variables are taken for the analysis and they are

Dependent variables:-

1. Mobile operators
2. Service quality-quality of phone calls
3. Service quality-quality of coverage
4. Service quality-quality of SMS
5. Service quality-quality of network
6. Service quality-quality of convenience & reliability
7. Service quality-quality of service centre and hotline
8. Service quality-rate of pricing for given quality
9. Service quality-score accumulation plan, bonus
10. Service quality-Advertisement

Independent Variables:-

1. Satisfactory level over performance-in general
2. Satisfactory level over performance-customer services
3. Satisfactory level over performance-billing system /RCV
4. Satisfactory level over performance-tariff rates
5. Satisfactory level over performance-call connectivity
6. Satisfactory level over performance-network coverage
7. Satisfactory level over performance-subscription easiness
8. Satisfactory level over performance-SMS, MMS, VAS
9. Satisfactory level over performance-offers, discounts

10. Satisfactory level over Performance-internet services
11. Satisfactory level over performance-ringtones, caller tones
12. Satisfactory level over performance-social responsibility
13. Satisfactory level over performance-ad and other promotional activities

Table I

Multiple Regression Analysis

Dependent variables	Independent Variables	F value	Beta coefficients	t value
1.Mobile operators	Satisfactory level over offers ,Discounts	4.538*	.150	2.130*
2. Service quality of Network coverage	Satisfactory Level Over Performance- Network Coverage	8.321**	.469	5.934**
3. Service Quality-Quality Of SMS	Satisfactory Level Over Performance-SMS,MMS	3.635**	.249	3.339**
4. Service Quality-Quality Of Network	a)Satisfactory Level Over Performance-Tariff Rates	7.913**	.218	2.806*
	b) Satisfactory Level Over Performance- Internet Services		.403	5.652**
5. Service Quality-Quality Of convenience	a)Satisfactory Level Over Performance-	5.991**	.170	2.313*

& Reliability	Internet Services b)Satisfactory Level Over Performance- Billing System /Rcv		.278	3.685**
6. Service Quality-Quality Of Service Centre And Hotline	Satisfactory Level Over Performance- Customer Services	4.249**	.260	3.166**
7. Service Quality-Rate Of Pricing For Given Quality	Satisfactory Level Over Performance- Internet Services	3.491**	.162	2.092*
8. Service Quality-Score Accumulation Plan, Bonus	Satisfactory Level Over Performance- Ringtones, Caller tones	3.958**	.208	2.674*
9. Service Quality-Ad	Satisfactory Level Over Performance- Ad And Other Promotional Activities	3.098*	.166	2.238*

*at 0.05significance level

** at 0.01 significance level

Step 1:-Performed correlation, by taking each one of the dependent variables with all the Independent variables and list of Independent variables extracted from the correlation matrix whose value fell below 0.5 with statistical significance. This is mainly due to avoid multicollinearity among the predictor variables, as these extracted Independent variables are subjected to Multiple Regression analysis.

Step 2:-By performing Multiple Regression for each Dependent variable, the list of Independent variables are selected as per the significance.

Interpretation:-

1. For every unit of change in discounts and offers or promotions, affects 0.15 unit of change in the mobile operators. Hence Mobile operators can increase their customer loyalty rate and implement Retention strategy based on Offers, Discounts and with other promotional tools.
2. Satisfactory level on Quality of Network coverage influences for its every one unit with 0.469 units of change in the service quality of Network. Therefore Operators should take necessary steps to focus mainly on quality of the network to increase customer loyalty,
3. Every single unit change of Satisfactory level over the performance of value added services influences 0.249 unit change in the service quality of VAS. Since the market taken for the Research is youth, Telecom companies should concentrate on Value added services by giving offers and promotional Recharge coupons with good quality.
4. Service quality of Network is highly influenced by satisfactory level on Internet services and with their tariff rates. Since for every unit of change in the satisfactory level of internet services and with their tariff rates, inducing 0.4 unit and 0.2 unit of change in the service quality of network respectively, marketers have to equip themselves to bridge up the customer mind gap.
5. From the table it is clear that for every unit change in billing service will pose the impact of 0.27 unit change in the Service quality of convenience. Hence for post-paid segment marketers should facilitate billing system for customer accessibility and precision.
6. For every unit change in the satisfactory level on Customer services and Ringtones influencing 0.2 unit change in their service quality. This indicates that customer services and product utilities should get strengthened for attaining customer loyalty
7. Each unit of satisfactory level on advertisements influences 0.16 unit of change on service quality implies Telecom should concentrate on Advertisements to create high loyalty.

Recommendations:-

Based on the above analysis, Telecom marketers should prioritize and concentrate on Quality of network coverage and internet services. Web oriented loyalty programs and promotional schemes to be introduced to increase customer loyalty. Marketers should give importance to enrich Customer services, value added services and adding promotional offers for SMS, MMS etc. The fact that youth, especially teens, are the biggest users of SMS and MMS services in markets is drawing increasing attention from marketers. Mobile marketing campaigns for youth audiences are to be devised for everything ranging from new product launches and mobile coupons to wireless community and mobile auctions Joint promotional campaigns can be engaged to ascertain customer loyalty. Successful marketing to youth should entertain and empower, be very responsive to their queries and needs, give them free reign in designing Web content, and engage them in quick-win SMS-based competitions. Marketers can add benefits with RCVs and in Advertisements to capture and sustain customer loyalty.

Conclusion:

The mobile industry of India is undergoing a vibrant change and the mobile number portability is paving the pathway for the subjective Research. This study is one such attempt to enhance the exposure on customer loyalty and it is also expected to facilitate the marketers to design the essential operational parameters for designing the retention strategies and to enhance Customer Experience management.

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MEASURING AND ASSESSING THE CUSTOMER SERVICE QUALITY OF SELECT PUBLIC AND PRIVATE SECTOR BANKS IN CHENNAI ENVIRON

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ABSTRACT

Financial liberalization and deregulation has increased the competition among banks to attract potential customers. Every banker tries to provide superior services to keep satisfied customers. In India, emergence and growing popularity of Indian banking products raises competition among Indian banks. Indian banks have to face numerous challenges in the recent age. Firstly, they are competing with their peers and secondly they have to cope with the conventional banks. Satisfied customer is the real asset for any organization that ensures long-term profitability even in the era of great competition. It is found that satisfied customer repeat his/her experience to buy the products and also creates new customers by communication of positive message about it to others. On the other hand, dissatisfied customer may switch to alternative products/services and communicate negative message to others. So, organizations must ensure the customer satisfaction regarding their goods/services. Thus, an attempt has made to study the satisfaction level of customers in selected Public and Private Sector Banks in Chennai Environ.

Keywords: Infrastructure Facilities, Accurate Services, Physical Appearance, Satisfaction, LEAN Process, etc.

INTRODUCTION

The performance of the Indian banking sector during the financial year 2016-17, however, remained subdued. First, the banking sector experienced a slowdown in balance sheet growth in 2016-17, a trend that had set in since 2011-12. The slowdown was most notable in the case of bank credit, which dipped to a single-digit figure during the year.

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Second, while profits of the banking sector turned around from an absolute decline in the previous year, this positive growth was on account of a decline in the growth of operating expenses rather than a rise in the growth of income of the banks. Third, notwithstanding the increase in profit growth, the return on assets (RoA), a common indicator of financial viability, did not show any improvement in 2016-17. In particular, the profitability of public sector banks (PSBs) diminished with their RoA declining significantly in recent years. Fourth, the deterioration in the asset quality of banks in general, and PSBs in particular, continued during the year with rise in volume and proportion of stressed assets.

The PSBs have contributed significantly to expand the outreach of Indian banking geographically and sectorally. Furthermore, they have been instrumental in providing credit support to the mammoth infrastructural needs of the country. However, the PSBs have been presently affected by several immediate concerns relating to profitability, asset quality and many long-standing issues about capital positions and governance.

REVIEW OF LITERATURE

Umma Salma (2013) conducted a research study to determine the satisfaction level of customer services offered by public and private sector banks. The author has compared the service quality offered by public and private sector banks. The author has used questionnaire to collect the data. A sample of 500 respondents has been selected by using convenient sampling. The studies revealed that majority of the respondents are satisfied with the services offered by private sector banks. The major fallbacks for public sector banks are poor infrastructure facilities and no strong relationship with customers.

RangsanNochai and TitidaNochai (2013) attempted to study the service quality of internet banking users in Bangkok. The author has used seven dimensions for internet banking service quality by using multi-nominal logistic regression analysis. The author has taken top three banks in Bangkok for this research study. The study revealed that there is a significant relationship between service quality and five factorial dimension viz., safety/security, competence, customer support services, user-friendly and performance.

Sundaram and J. Premalatha (2012) investigated the customer satisfaction level of banking industry in Vellore District. The authors have framed a structured questionnaire to determine the satisfaction level of customers. The results revealed that banks must concentrate more on safety / security, accuracy of information, and timely services. The authors have suggested the banks to facilitate customer to make use of ATM services. It is also found that customers are highly satisfied with the ATM service provided by the banks.

OBJECTIVES OF THE STUDY

- To study the level of customers' satisfaction towards General and Infrastructure Facilities in selected public and private sector banks in Chennai City.
- To study the level of customers' satisfaction towards Ease and Accurate Services in selected public and private sector banks in Chennai City.

RESEARCH METHODOLOGY

Study Area: The area of study to measure the satisfaction of customers is the district of Chennai City which is in the state of Tamil Nadu. The analysis of customer satisfaction is conducted with reference to select public and private sector banks customers in Chennai City.

Sampling Size and Design: In the present study, the public and private sector banks have been selected as the sample based on the Number of Branches in Chennai. Totally 550 questionnaires were circulated to the bank customers to determine the satisfaction level. The respondents from the sample branches were selected by using stratified random sampling technique. The top five public and private sector banks having more number of branches in Chennai have been considered for the study.

Questionnaire Design: The questionnaire was framed based on the research gaps of the study. The questions were posed to bank customers on selected areas soliciting their responses in different scales.

LIMITATIONS OF THE STUDY

1. The responses for the study have been solicited from the city of Chennai only, which may vary from those of the rest of India.
2. The researcher has covered mainly five public and five private sector banks in India for the purpose of the research. Therefore, remaining public & private sector banks and foreign banks performances have not been included in the study.

ANALYSIS AND INTERPRETATION - LEVEL OF SATISFACTION TOWARDS GENERAL AND INFRASTRUCTURAL FACILITIES

One sample t-test is used to test the level of satisfaction towards General and Infrastructural facilities in Banks in Chennai. Satisfaction towards General and Infrastructural facilities was measured through ten variables. To test the significant difference between the mean value of the variables measured under satisfaction towards

General and Infrastructural facilities against the test average response of 3 (mean score). The following null hypothesis is framed:

H₀: There is no significant difference between customer's satisfaction towards General and Infrastructural facilities in Banks and the average score.

Table 1.01 shows the results of one sample t-test for significant difference between the variables measured under satisfaction towards General and Infrastructural facilities in Banks and the average score.

Table – 1.01
One Sample t-test for Satisfaction towards General and Infrastructural Facilities

Statements	Mean	SD	t-value	p-value
The number of branches in the city is sufficient	3.69	1.104	14.759**	<.001
Location of branches is convenient	3.74	1.143	15.262**	<.001
Location of the ATM's is convenient	3.66	1.195	12.881**	<.001
The timings of the bank is convenient	3.54	1.180	10.768**	<.001
Adequate number of employees	2.80	1.005	3.457**	.009
Arrangement of premises inside the office viz., number of counters, waiting lobby, drinking water, and writing slips etc.	2.75	1.385	4.312**	<.001
Availability of Sign Boards viz., cash deposits, loan section, may I help you, etc.	3.52	1.270	9.604**	<.001
Adequate parking space is available	2.51	1.284	8.998**	<.001
Physical appearance of the bank is good	2.77	1.380	4.297**	.003
Enormous space to transact business	2.82	1.365	3.405**	.001

Source: Computed Data

**** Significant at 1% level**

From table 1.01 t-values of the variables under satisfaction towards General and Infrastructural facilities in Public and Private sector Banks in Chennai are 14.759, 15.262, 12.881, 10.768, 3.457, 4.312, 9.604, 8.998, 4.297, 3.405 are significant at 1% level. This shows that there is significant difference between the mean responses given by the respondents for General and Infrastructural facilities in Banks and the test average score (=3). Further the mean value of the variables: The number of branches in the city is sufficient (3.69), Location of branches is convenient (3.74), Location of the ATM's is convenient (3.66), the timings of the bank is convenient (3.54), Availability of Sign Boards viz., cash deposits, loan section, may I help you, etc. (3.52) are above the average level. The

mean value of the variables: Adequate number of employees (2.80), Arrangement of premises inside the office viz., number of counters, waiting lobby, drinking water, and writing slips etc. (2.75), Adequate parking space is available (2.51), Physical appearance of the bank is good (2.77), Enormous space to transact business (2.82) are below the average level. This shows that the customers are satisfied with the General and Infrastructural facilities offered by the Public and Private sector Banks in Chennai. The respondents are having good satisfaction towards convenient location of branches, sufficient number of branches, convenient location of the ATM's and convenient banking hours. At the same time the respondents expressed their dissatisfied towards the inadequate number of employees, arrangement of premises inside the office, insufficient number of counters, waiting lobby, drinking water and writing slips etc., inadequate parking place, physical appearance of the Bank and space for business transaction.

ANALYSIS AND INTERPRETATION -LEVEL OF SATISFACTION TOWARDS EASE AND ACCURATE SERVICES

One sample t-test is used to test the level of satisfaction towards Ease and Accurate Services in Banks in Chennai. Satisfaction towards Ease and Accurate Services was measured through seven variables. To test the significant difference between the mean value of the variables measured under satisfaction towards Ease and Accurate Services against the test average response of 3 (mean score). The following null hypothesis is framed:

H₀: There is no significant difference between customer's satisfaction towards Ease and Accurate Services in Banks and the average score.

Table 1.02 shows the results of one sample t-test for significant difference between the variables measured under satisfaction towards Ease and Accurate Services Banks and the average score.

Table – 1.02
One Sample t-test for Satisfaction towards Ease and Accurate in Services

Statements	Mean	SD	t-value	p-value
Cash withdrawal	3.60	1.372	10.253**	<.001
Cash deposits	3.59	1.332	10.432**	<.001
Entry in passbook	3.43	1.398	7.199**	<.001
Account opening	3.39	1.450	6.321**	<.001

Issue of demand draft	3.57	1.335	10.060**	<.001
Issue and collection of cheques	4.15	.940	28.757**	<.001
Short duration to transact business	3.46	1.396	7.725**	<.001

Source: Computed Data

** Significant at 1% level

From table 1.02, t-values of the variables under satisfaction towards Ease and accurate services in Public and Private sector Banks in Chennai are 10.253, 10.432, 7.199, 6.321, 10.060, 28.757, 7.725 are significant at 1% level. This shows that there is significant difference between the mean responses given by the respondents for Ease and accurate in services in Banks and the test average score (=3). Further the mean value of the variables: Cash withdrawal (3.60), Cash deposits (3.59), Entry in passbook (3.43), Account opening (3.39), Issue of demand draft (3.57), Issue and collection of cheques (4.15), Short duration to transact business (3.46) are above the average level. This shows that the respondents are having good satisfaction level with the Ease and accurate services in Public and Private sector banks in Chennai. Respondents are very much satisfied towards issue and collection of Cheques, the respondents expressed their satisfaction towards withdrawal of cash, deposits, passbook entry, opening of an account, issue of demand draft and duration for transaction.

TESTING OF SIGNIFICANT DIFFERENCE BETWEEN BANKING SECTOR WITH RESPECT TO SATISFACTION TOWARDS BANKING SERVICES AND FACILITIES

To test the significant difference between Banking sector with respect to satisfaction towards Banking services and facilities (General and Infrastructural Facilities& Ease and Accurate Services) in Chennai, One way ANOVA is applied to identify the significant difference between Banking sector with respect to satisfaction towards Banking services and facilities. The following null hypotheses are framed:

H₀: There is no significant difference between Banking sector with respect to (a) General and Infrastructural Facilities (b) Ease and Accurate Services

Table – 1.03

Significant difference between Banking Sector with respect to Satisfaction towards Banking Services and Facilities

Variables	Banking Sector	N	Mean	S D	F- value
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General and Infrastructural Facilities	Public	272	2.98	0.864	79.056** (p<.001)
	Private	278	3.69	1.000	
Ease and Accurate Services	Public	272	3.20	1.072	71.776** (p<.001)
	Private	278	3.99	1.103	

Source: Computed Data

****Significant at 1% level**

General and Infrastructural Facilities

The obtained 'F' value **79.056** is significant at 1% level. The formulated hypothesis “There is no significant difference between banking sector with respect to satisfaction towards General and Infrastructural facilities in Banks” is rejected. It indicates that there is significant difference between banking sector with respect to satisfaction towards General and Infrastructural facilities in Banks.

Further the mean table 1.03 indicates that the customers of Private Banking sector have scored highest mean value of **3.69** and the lowest mean was scored by the customers of Public sector Bank (**2.98**). This shows that the customers of Private sector Banks are more satisfied towards General and Infrastructural facilities offered by the Banks than the customers of Public sector Banks.

Ease and Accurate Services

The obtained 'F' value **71.776** is significant at 1% level. The formulated hypothesis “There is no significant difference between Banking sector with respect to satisfaction towards Ease and accurate services in Banks” is rejected. It indicates that there is significant difference between Banking sector with respect to satisfaction towards Ease and accurate services in Banks.

Further the mean table 1.03 indicates that the customers of Private sector Banks have scored highest mean value of **3.99** and the lowest mean was scored by the Public sector Banks (**3.20**). This shows that the customers having access with Private sector Banks are more satisfied towards ease and accuracy in services than the customers of Public sector Banks.

FINDINGS OF THE STUDY

- It is observed that customers are satisfied with the General and Infrastructural facilities offered by the Public and Private sector Banks in Chennai. But, At the same time the respondents expressed their dissatisfied towards the inadequate number of employees, arrangement of premises inside the office, insufficient number of counters, waiting lobby, drinking water and writing slips, inadequate parking place, physical appearance of the Bank and space for business transaction.

- It is observed that the respondents are having good satisfaction level with the Ease and accurate services in Public and Private sector banks in Chennai.
- It is observed that the customers of Private sector Banks are more satisfied towards General and Infrastructural Facilities offered by the Banks than the customers of Public sector Banks.
- It is observed that the customers having access with Private sector Banks are more satisfied towards Ease and Accuracy in Services than the customers of Public sector Banks.

SUGGESTIONS OF THE STUDY

Based on the findings of the study, a few measures have been suggested to improve the customer satisfaction of public and private sector banks.

- Optimum application of technology and human intelligence will have to work in tandem to reduce the turnaround time and to enhance operational efficiency. The new age customers accord more importance to time management and staff have to be trained to be time sensitive.
- To enhance the systems and procedures, banks should go for customer feedback mechanism system on a regular basis to identify the level of requirements and satisfaction.
- Banks should go for regular market studies/research to identify the behavior of customers and their response to services. It helps the banks to understand the needs and requirements of the customers.
- Banks should adopt lean process or process improvements on a regular basis. The lean process or process improvement is taken to reduce the turnaround time, cost reduction, error free service quality, etc. which will have a direct impact on banks for better service.

CONCLUSION

From the research study, it can be concluded that the level of customer satisfaction depends upon the services rendered by the banks, adoption of latest technology and effective customer relationship management.

The result and analysis shows that private sector banks are performing well compared to public sector banks in India. It may conclude that the suggestions given can be implemented by the banks to improve their customer satisfaction.

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UNDERSTANDING THE SCOPE OF ARTIFICIAL INTELLIGENCE IN HR TECHNOLOGY E-RECRUITMENT – A THEORETICAL PERSPECTIVE.

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Abstract:

Information technology has had concentrated upshot on human resource management (HR) processes and practices. When we move towards edifice stylish organizations, Artificial Intelligence plays a elementary role towards the success of transforming human knowledge into organizational knowledge. Artificial intelligence is an promising area in the field of HR Technology which can replace or enhance the effectiveness of human resource management processes. Artificial Intelligence can be used by organizations for candidate screening, employee engagement, employee re – engagement and career development. It can be applied to HR policies, procedures and HR perspective and can enhance the effectiveness of human resource management. The learning will analyze the appearance of Artificial Intelligence in HRM process and the prospective profit of artificial intelligence through secondary data. The paper generates insights on the utilization of technology for switch of effective HR into sustainable HR.

Keywords: Artificial Intelligence, Human Resource Management, Potential benefits, HRM Process.

Introduction: During 2017, trends such as Artificial Intelligence (AI), automation, and big data and analytics in progress permeate enthusiastic on the recruitment development. Numerous organizations also advocated bureau variety and applicant experience in recruiting for better results. In the next one year, these trends will find a stronger grip as recruiters have realized that in order to stay relevant and cutthroat, they always need to stay up to date on the most up-to-date emerging trends in recruitment practices. At the same time, as technology continues to augment HR activities in increasingly empowering ways, we would see new practices and trends evolving in the market.

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Research Objectives :

Following are the objectives of the study:

1. To find out the benefit or importance of using the artificial intelligence in Human Resource Management.
2. To evaluate how artificial intelligence can revolutionize the HR Process.

Research Methodology: This study is using the descriptive research design to describe the scope of artificial intelligence in human resource management processes. Secondary data collection method is used for the study. The data has been collected through the articles published in newspaper, magazine, HR Blogs, research journals, examination reports published by various research organizations, books and online sources also.

Some of the major trends set to redefine recruitment or talent management in 2018 and beyond include:

1 - Talent analytics on an surge

Alacrity of hiring is highly serious in the modern world. With the amount of competition vie in this field with excellence candidates exploring job opportunities with several prospective employees at the same time, it is vital for recruiters to cut down the time spent on identifying the right prospects, rummage through CVs, cross-examining facts, and taking decisions. It is here that smart practice of talent analytics is taking the recruitment by storm globally and is now making inroads in India.

“Application of analytic tools will be required to ensure that secure digital workplace provide the end-user with the best potential experience across the devices they use,” said Makarand Joshi –Area Vice President and Country Head, India Subcontinent, Citrix. With the help of big data and analytics, demand and supply trends, specific employee insights, salary trends, recognition of talent pools among others are helping hiring managers to boost their decision-making process.

It is quite likely that there will be an increase in the use of this highly efficient tool in India this year. Startups and small businesses, too, will take to analytics, to make their recruiting process more practical, real time, appropriate, and analytical in nature.

2 - Artificial Intelligence to boost efficiency

Artificial Intelligence (AI) is previously creation inroads in recruitment and, in 2018 we will see a sharp amplify in the uptake of AI-enabled chatbots to competition candidates with jobs. “Chatbots are playing a key role in strategic work like recruiting concierge, bot-run interview prep class, talent community management and responses to candidates,” said Francis Padamadan, Country Director, KellyOCG India.

As a outcome, recruiters can spend additional time addition worth to the sourcing and selection process: conducting interviews and selecting the right and quality candidates. AI will also help in automating numerous ordinary each day odd jobs such as indexing and filing candidate records, on boarding, measuring presentation and so on, contributing real business value.

Unlike the anticipation of job loss, automation and AI need not necessarily liken to the loss of human jobs; in fact, experts believe, it can help in augmenting current HR roles by eliminate low making tasks and patter into AI to make informed personnel decisions. The resulting enhanced efficiency of the HR function will be familiar across the business.

3 - Design thinking as a strategic HR tool

As more and more companies hire employees across different time zones, working on multiple projects and using different media, organizational design will develop to accommodate a better workforce. Managers are likely to be hired on a project basis, warranting a move in performance management. In 2018, we can expect managers to be providing real-time opinion and coaching in place of fixed assessment cycles.

“While initially developed in the context of customer experience and development of new products, design thoughts also serves as an effective tool and set of guiding values for HR leaders to identify important moments that impact and connect employees in root cause analysis and brainstorming of different solutions, and in effectively driving change management around new initiatives,” said Chris Collins, director of the Cornell Center for Advanced Human Resources Studies (CAHRS) in his blog. For example, Collins sees businesses to be investing in mobile performance coaching applications to ease and follow performance discussions in the next one year.

4 - Augmented and virtual reality to boost hiring

Augmented Reality (AR) and Virtual Reality (VR) will begin to find their way into HR and talent acquisition. In the next one year and further than, one can expect more interactive job

advertisements, go on a VR tour of your outlook workplace in the US, while sitting in India, and complete VR assessments during the hiring process.

AR/VR will also be used to improve the employee experience by providing simulations of tasks and work challenges, better preparing workers for real-world situations before they have to face them. In other words, the opportunity of talent management will see a more symbiotic relationship between people and technology in the workplace.

5 – Employee Wellness in HR and recruitment

According to a current report, 55% companies will provide flexible working hours, 47% companies will facilitate employees to Work from home and 42% companies will promote their existing or new wellness programs. These are perks current employees are looking for over and above their basic pay package. What matters more to them is the elasticity and freedom a company can offer. Work-from-home options, telecommuting, flexi work timings, are factors today's recruits take a special liking to. Wellness programs is an additional area Indian companies have started taking more critically in the recent past and this tendency is here to stay.

Advanced and digital technologies will fortify and expand the HR toolkit. In turn, HR will play a new, enhanced role in this background. In 2018 HR will be active in preparing the workplace and the workforce for the tsunami of changes ahead. In doing so, HR professionals will also need to cautiously ride the sign of change, rather than be swamped by it.

Miscellany resolve amongst the crown fashion in the recruiting industry this year as 81 per cent leaders in India say it impacts their hiring procedure, as per a survey. According to the LinkedIn 'Global Recruiting Trends' survey, diversity will be among the top four trends that will play a key role in the way job-seekers discover jobs, get hired and continue engaged at work in 2018.

Additional key trends are artificial intelligence (AI), data and insights and new-age interview process, it added. It said about 78 per cent of talent leaders globally and 81 per cent in India established that diversity impacts how they hire.

The survey said companies are prioritizing diversity as it enhances productivity and promotes innovation. Gender (71 per cent), race (49 per cent) and age (48 per cent) are the

areas where companies are focusing their diversity efforts, it said. LinkedIn surveyed on the subject of 9,000 recruiters and hiring managers from 39 countries.

AI impact

Further, 76 per cent of respondents said AI's impact on recruiting will be significant and will help them work faster by automating organizational tasks and smarter by generating insights they wouldn't think of alone, it said. Areas where AI will impact recruiting the most include sourcing candidates (58 per cent), screening candidates (56 per cent) and nurturing candidates (55 per cent), it added. It said 67 per cent respondents felt AI helps saving time and 43 per cent believe that it removes human bias.

Meanwhile, the survey exposed that Mexico (61 per cent), Brazil (59 per cent), India (56 per cent) and China (56 per cent) are the four countries with the highest number of respondents who held that using data is the top trend affecting how they hire. The global average is 50 per cent, it added.

Talent acquisition

The survey also showed that 64 per cent of the talent acquisition professionals use data now and 79 per cent are even more likely to use it in the next two years. Regarding 69 per cent of talent professionals consider to facilitate by means of data can elevate their careers, it said.

Currently, the five most common uses of data in talent acquisition are to increase retention (56 per cent), estimate skills gap (50 per cent), build enhanced offers (50 per cent), understand candidate wants (46 per cent) and do workforce preparation (41 per cent).

However, the survey found that the two major barriers in using data include poor data quality (42 per cent) and figuring out where to find the data (20 per cent). The fourth key trend is new interviewing models, which is reinventing the interview by merger conventional with smart models.

Bigger than the worldwide average of 56 per cent, 61 per cent of Indian respondents said interviewing innovations are extremely imperative to the opportunity of hiring, according to the survey.

It also said that companies continued to consider in the reputation and effectiveness of traditional interview techniques with giving maximum prominence to structured interviews (88 per cent) and behavioural interviews (89 per cent).

Talent leaders find interviewer bias (42 per cent), partial ability to assess soft skills (63 per cent) and weaknesses (57 per cent) as the most common shortcomings of traditional interviews, it said. To overcome this, hiring managers are looking at interview models and techniques, including soft skills assessments, job auditions, meeting in informal settings, virtual reality assessments and video interviews to improve the mature model, it added.

Using Artificial Intelligence in Recruitment to drive efficiency

Application of AI implies using mechanism learning's prototype recognition methodology. By tracking all the input and output data after some time of frequent use, AI algorithms are competent of verdict the most efficient methods of accomplishing tasks and that's what it makes a much desirable tool for recruitment. The data driven advance of artificial intelligence addresses recruitment weaknesses such as physical error due to fatigue or biased judgment, thereby, driving efficiency.

As per Deloitte's 2017 Global Human Capital Trends survey findings, 81% of respondents put talent acquisition as the succeeding most important challenge. Using technological advances like AI one can incorporate smart algorithms that change the process and allow recruiters to hire better talent without wasting much time and resources. Some recruitment management software come surrounded with AI algorithms to automate HR processes like matching CVs, thorough candidate in sequence across the web, processing it and creating a complete profile. The HR can later analyze the profile and combine it with the CV to come up with candidates that are best suited for the open vacancy.

Increasing Candidate Pool with Artificial Intelligence in Recruiting

There is no uncertainty that a machine-assisted search will reach to a better pool of candidates than a human recruiter's manual search. But AI takes this attain a step further. Artificial intelligence algorithm analyses the social media profiles, and posts of candidates to help come up with a better pool of options those who might be suitable for the role. This doesn't increase the work of the recruiter, as AI only selects those which are the adjacent fit. In fact, it gives the HR a bigger set of options from which he can decide the best.

Some benefits of AI in recruitment

- ✓ AI reduces a recruiter's tiresome task and boosts his productivity.
- ✓ Automation streamlines the whole recruitment process and reduces the hiring time by half.
- ✓ A company's status and goodwill increases as the responsiveness of the chatbots to the candidates is 100%.
- ✓ By standardizing the whole process and removing the incongruity, the quality of hire can be radically improved.

Handy appliance of AI in recruitment

Mya is a very in style recruitment supporter chatbot that automates approximately 75% of the recruitment progression. It commune with candidates with the assist of trendy messaging apps like Facebook and can also afford abrupt comment to applicants. Candidates can also ask Mya about the company's culture and their hiring procedures.

This is definitely a huge step towards solving real-time business problems such as recruitment.

The future challenges

Since technologies take time to grow and experienced it should be tacit the same would be in the case of AI in recruitment. There are sure challenges which can slow down the AI juggernaut in the recruitment pitch. Some of the challenges with AI in recruitment are:

- In the initial screening procedure of the resume the data should be accurate to make AI hiring effective.
- If recruiters feel they can do a healthier job at hiring, the HR department would be reluctant to put into practice AI in their offices.
- As MI can learn from itself, it can also pick up human biases and prejudices and that can unfavorably influence the whole recruitment process.

Most experts judge AI in recruitment can be a significant fly ahead in the sector. It would be attractive demanding in the approaching time for blue-collar HR to compete with it.

Lastly, this automation will positively take out the strain from the complete hiring process and make it infinitely efficient.

Conclusion: Contraption preserve outshine the human point of intelligence and ability. HR software will become software that learns from experiences. The data processor in the AI system finds the effective way to achieve the objective of any task. This technical innovation can help the HR managers to manage the HR process, policies, and employees effectively. The technology has changed the way of working system.

The credit goes to the programmers, processors, computers and internet. The world has become smaller and future generation will use advance technologies for the human resource management purpose.

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A STUDY ON FINANCIAL SUPPLY CHAIN MANAGEMENT WITH REFERENCE TO IGARASHI MOTORS INDIA LIMITED

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ABSTRACT

This research study explores the application of supply chain finance (SCF) of Igarashi Motors India Limited which is into the production of micro motors. The SCF is also called supplier finance, and mainly it is used to deal with the financial issues in supply-side value chain management. The impact of SCF on corporate performance reflects in the improved supply chain efficiency in terms of cost saving payable processes and payment term extension. This paper analyses the relationship of performance indicators derived from the financial supply chain management (FSCM), and depicts its influences on profitability of the company. Through the implementation SCF program, decreased costs of goods sold (COGS) obviously can increase return on invested capital (ROIC) and return on equity (ROE) in short term. The cause-effect relationships between the FSCM performance indicators and profitability are established by the EVA model and tested by correlation analysis. Together with early discount payment, the company will be able to save financing costs as well as increase cash and speed up cash flows. It can also extend payment terms to attain positive cash flows and to increase economic value added. This paper provides financial solutions to enhance supply chain finance in the supply-side value chain and also to increase its returns on equity and assets to enhance the value of its shareholders. This study substantiates that the impact of SCF on corporate performance can increase corporate economic power in the marketplace and remains competitive.

Keywords: Return on investment, Cost saving, supply chain model.

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INTRODUCTION

The impact of financial crisis brings new challenges as well as new opportunities to the development of supply chains. The link between supply chain and financial flows is considered as an inevitable strategic solution while improving corporate performance. The introduction of supply chain finance to the supply chain management is able to help corporate remain competitive and increase economic value added. Ideally, the effects of development are possible to be observed in short term. Ultimately, the win-win outcomes will benefit both large and small participants.

The development of supply chains

Nowadays the supply chains have been developed more complicated as the business has become more international. The term of supply chain management is first introduced by U.S. industry consultants in the early 1980s (Oliver 1982). The expansion of physical capabilities in international logistics has started since the early 1990s, and the trend of global economic integration becomes evident everywhere. With the development of e-business, communications between suppliers and buyers become instant by information systems. For example, the buyers can have access to any suppliers irrespective of location and available at any time. It reduces costs, improves service levels and increases profits.

The Link between Supply Chain and Financial Flows

There are many companies have not noticed the disconnection between overall business strategy and supply chain strategy in the organization; financial, information and physical flows are seldom synchronized. However, economic growth and capital utilization in the firm are expected to be optimized through the integration of information, financial and physical supply chains. The strong interdependency between operations and financial departments enables corporate to maintain competitive advantages in industries. The competitions among companies rely on a more cost-effective chain – a lower cost to serve the final marketplace and achieved in the shortest time period possible. The ABC tools are not used for the evaluation of financial performance, because delayed payment, return on investment/equity are not concerned as analytical indicators. Therefore, this evaluation tool is not satisfactory enough to be applied at the tactical stage for the overall corporate valuation. Balance scorecard (BSC) is also widely applied when conducting performance measurement.

Supply chain finance

Supply chain finance (SCF) is an approach that aims to improve the supply chain efficiency. It is intended to improve payment terms, to reduce costs and to accelerate cash flows. Overall, the well-gained credit rating to the small/weak participants from the

strong/large participants and the simplicity of payable processes will enhance the supplier-buyer partnerships. Collaborations between the financial side and the operating side need an encompassing approach.

The integration of SCF into SCM

Reducing the financing costs and optimizing cash flows in the supply chain can be seen as the main functions of the SCF program. It is orientated to motivate supply chain development, risk adjustment and value creation through improved operational performances with respect to the reconfiguration of financial resources. The levers of the SCF program are volume, duration and cost of money. Benchmark financial indicators using supply chain operations reference (SCOR) model can help supply chain managers to visualize the link between operational performance and the financial statement.

FINANCIAL SUPPLY CHAIN MANAGEMENT

The application of the SCF program in supply chain management includes payable processes to be exhibited. The selection of FSCM performance indicators and profitability ratios will be discussed according to the EVA model. Following, detailed arguments on how the changes of supply chain efficiency can have impacts on profitability should be stated. Overall, the whole chapter is extended to provide fundamental theoretical support for further empirical analysis on cause-effect relationships between the FSCM performance indicators and the profitability ratios.

The EVA model is used to link the value drivers from the operations to the financial performance. The EVA model tree leads to

- 1) The net operating profit after taxes (NOPAT)
- 2) The cost of capital.

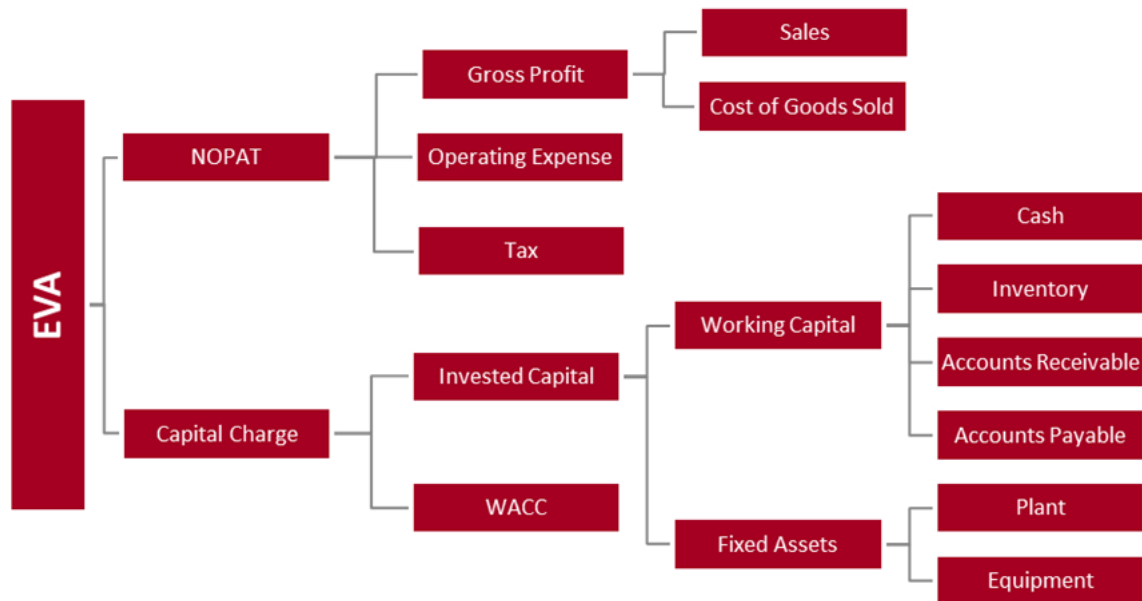


Fig.No: 1 – EVA Model in Supply Chain Finance

Key performance Indicators of FSCM:

- **Days in inventory:** This is the length of time between the delivery of the goods and the invoice from the supplier, and the sale of the goods and the invoice to the customer. It describes the average number of days the goods of a company remain in inventory before being sold. This metric is the focus for all activities around classical supply chain management (inbound logistics and inventory management).
- **Days in payables:** This is the length of time between delivery of the goods and the invoice from the supplier, and the actual payment for the inventory. This figure describes the average time it takes to pay a supplier. The parameter considers the outstanding receivables of a company, and is an important metric for debtors concentrating on their efforts to optimize the purchase-to-pay cycle.
- **Days sales outstanding (DSO):** This is the length of time between the sale of the goods and the invoice to the customer, and the actual payment date of the customer. This metric measures the average number of days companies need to collect revenue after a sale has been made. A high DSO number means that an enterprise is selling to its customers on credit and taking longer to collect money.
- **Days in receivables:** This is the length of time between the sale of goods and the invoice, and indicates the average time, in days, while receivables are outstanding. Days in receivables can also be called best possible DSO, since the company would collect all receivables before the due date.

Within the cash flow cycle there is potential to reduce both days in inventory and days sales outstanding. Days in payables can be reduced but should be monitored carefully to avoid putting supplies at risk. Days in receivables can be reduced by optimizing cash collection. One of the key objectives of financial supply chain management is to optimize the working capital.

INDUSTRY PROFILE

The Global electric motor industry is characterized by increasing demand for high efficiency motors in HVAC, household appliances and industrial machinery in order to reduce energy losses and improve overall performance of the appliances/machinery. Technological advancements have paved way for higher efficiency and integration of electric motor-drive components thus reducing compatibility issues that are otherwise persistent in end-user specific applications. Also advent of better insulation materials has improved operational life and efficiency. The automotive industry has been their major end-user on account of finding progress in a variety of applications that range from power generation to hydraulic systems. They are widely used in compressors, industrial fans, pumps, domestic appliances, lathe machines, machine tools, power tools, HVAC applications, disk drives, electric cars and automated robots. These high efficiency motors, which are also called as premium efficiency motors, are gaining importance over their conventional counterparts due to longer operating life, low energy consumption, low maintenance, and high tolerance for fluctuating voltages. Premium motors are expensive than the standard ones; however, consumers are now foreseeing the future and understanding long-term benefits associated with the former ones. Eventually, energy efficient and low noise motors are expected to gain traction.

PRODUCTION TRENDS

The turnover of local producers grew at a slightly slower pace than the overall market, seeing a 91% increase over 2006-2012. The largest category of the industry under review was the manufacture of electric motors and generators, comprising 57% of total turnover in 2012. Miscellaneous industrial electrical apparatus generated a further 29% of total income, while power distribution transformers accounted for the remaining 14% of turnover. As electric motors use around 45% of global electricity, local producers are under more strict efficiency standards, imposed by the government.

New Mexican Minimum Energy Performance Standards (MEPS) came into action in 2010, replacing those adopted in 2002. According to regulations that adjust energy performance standards to manufactured goods, the minimum efficiency level was set to IE2.

COMPETITIVE ENVIRONMENT

Over the review period the number of companies active in the electric motors, generators and transformers industry increased by 35% to almost 1,300 enterprises in 2012. The reviewed industry is highly concentrated, as micro-sized companies employing fewer than 10 people accounted for 82% of the total number of establishments, but the major share (85%) of turnover was generated by the largest companies, employing more than 250 people. One of the largest players in the field is Xignux SA de CV, a Mexico-based company which operates in such categories as cables, transformers, infrastructure and foods. The company has 25 production facilities and 20,000 employees. Exports account for 58% of the company's revenue.

COMPANY PROFILE

The history of Igarashi Motors started in 1946 by Eiji Igarashi who established a private company in Kawasaki, for the production and sales of D.C. motors for toys and model ships. Since then, it has been developing and manufacturing small D.C. motors, for more than fifty years. In India the company was established in 1993 in a joint venture with Crompton Greaves for development, production and sales of DC motors, DC motors with accessory, and assembly service like end cap/case/armature. To meet market needs, a holistic approach to the small DC motor is necessary.

BACKGROUND

IMIL was promoted as a joint venture between Crompton Greaves Ltd (CGL), Igarashi Electric Works (IEW), Japan and Igarashi Electric Works (H.K) Limited, Hong Kong. During 2003, CGL divested its holding in favor of IEW following which the company changed its name to present one. IMIL is engaged in the business of assembling DC motors and actuation system for various automotive and non-automotive applications and manufacturing sub-assemblies that go into a DC motor. The company has its manufacturing plant in Chennai, India. The company has an installed capacity to produce 9 million numbers of electric micro motors as on March 2010. During FY10, the company produced 7,854,211 numbers of electric micro motors as against 6,677,856 produced in FY09. During FY10, the company earned ~77% of its revenue from exports and ~23% from domestic sales.

Company Policy

Making itself faithful to the principle that the customer is the first consideration with us, with reliable technology, products and service, and exerting itself for improvement of social life; we carry on creating a fertile future for the human and earth guides to action.

- We devote our self to being customer-oriented
- We act with a world-wide view of things
- We peruse originality and innovation
- We aim at a fertile life

Products of Igarashi

We are now enjoying modern life through numerous leading-edge devices, equipment and appliances. These are enabled by the innovative advancements of modern technologies that include electronics backed by the amazing progress in the semiconductor area. We, however, should not overlook the existence of small DC motors supporting innovative function improvement. In fact, it is difficult to look for products around you with no motor inside. Igarashi has been dedicated to manufacturing DC motors and gear motors for over 5 decades since its foundation in 1952. These are well accepted and used worldwide in the automotive area, OA equipment, home appliance, power tool and industrial appliances.

LITERATURE REVIEW

James C. Brau, Stanley E. Fawcett, Ladd Morgan (2007), in this article the value proposition hypothesis of supply chain management (SCM) is tested by examining survey results of 570 US managers. First, they find that large firms use SCM initiatives significantly more than small firms. Second, in univariate and multivariate tests, it is found that SCM leads to significant improvements in asset utilization, revenue generation, and competitive performance, regardless of firm size. These two major findings suggest that managers at small firms that are not actively engaged in SCM should reevaluate their opportunity to capture the competitive benefits of SCM that many large firms currently enjoy.

Nicolas Hurtrez October (2010), this article examines the evolution of supply chain finance and discusses the strategic options available to banks seeking to play a role in this new model of trade and cash management services. In light of these new economic realities,

supply chain finance may enable banks both to increase the value of their trade (and treasury) services and improve corporate liquidity. SCF, however, poses significant competitive threats as well as potentially huge opportunities for banks, large and small. The ongoing transition toward open source networks makes it possible to procure almost any good or service, including financial services, from anywhere in the world, and banks need to set a clear strategy to secure and optimize the value of their trade and treasury services on the basis of a more complex and integrated delivery platform.

Charles Bryant, Enrico Camerinelli(2011), the key focus areas of the Guide elaborate on the layers of work specified in describing the ecosystem for supply chain management and SCF and the drivers that are propelling or constraining take-off and adoption, raising issues relating to market terminology and conceptual language. In describing the various instruments of SCF the Guide proposes a ‘holistic’ approach and discusses some key definitions that are mainly aligned with common industry parlance, identifying and explaining the key risk and regulatory issues impacting SCF. It links SCF to the trend towards automated supply chain processes and describing how it is benefiting and could benefit further from the application of technology and business- to-business (B2B) platform capabilities. Makes recommendations on managing industry collaboration and partnerships at all levels and summarizes work on the corporate value proposition.

Peter Kristofik, Jenny Kok, Sybren de Vries, Jenny van Sten-van’t Hoff (2012), the paper is aimed at finding differences in Working Capital Management (WCM) between Small and Medium sized Enterprises within the Dutch and Slovakian construction industry. Furthermore, the focus of the research is on finding a way a Small and Medium sized Enterprise can improve its WCM. A Case Study research method is used, because a rich understanding of the context of the research is gained. The primary data of this research is obtained via questionnaires whereas the secondary data is collected and gathered via databases. Research has shown that there are big differences in the way working capital is optimized.

Dr. Hanaa El Sayed (2013), this paper is discussing some of supply chain KPIs, which are used in its practical case, what types of analysis are done on them, in which forums or meetings they are discussed, and the improved results. This concept was started as part of supply chain reengineering process in industrial international Fast Moving Consumer Goods (FMCG) Company by initiating Sales and Operational Planning Process (S&OP), and get use of much raw data and transforming it to meaningful analysis which helped the organization to improve their decisions.

Jan H Jansen (2014), the article provides an overview of the main factors influencing the new topic of supply chain finance, as well as a practical case study to illustrate the state of the art of business implementation for a SME. It discusses the methods in reduction of capital costs in the supply chain, by lowering the volume of working capital, the duration of capital needed and the costs of capital.

Dr. Mohamed Baymout (2015), in this report, a case study using SAP ERP system in managing financial supply chain will be discussed in detail. The paper defines FSCM as to manage key processes around risk, working capital and information between parties within the supply chain. Traditionally, FSCM is paper-based and managed in different functional departments. Currently, due to advanced networking and EDI technologies, FSCM breaks the functional silos by crossing different functional departments to complete end-to-end business processes in real time.

NEED FOR STUDY

According to the financial reports of Igarashi motors, it has been identified that the cash conversion cycle period has increased 15.68% i.e., to 57 days approximately over the past 5 years. The cash conversion cycle is a measure of how long an investment is locked up in production before turning into cash, it also involves determining how long it takes to create inventory, sell inventory and collect on invoices to customers. The increase in the cash conversion period has indirectly eaten up the profit and also affects the liquidity of the company. Therefore this study aims at minimizing the cash cycle period and to optimize cash flows throughout the supply chain process by which the supply chain finance of the company can be enhanced.

OBJECTIVES OF THE STUDY

- To present the impact of Supply Chain Finance (SCF) on the overall corporate performance through Key Performance Indicators (KPIs) of SCF.
- To find out the relationship between Return on Invested Capital (ROIC) and Weighted Average Cost of Capital (WACC).
- To suggest ways to reduce the Cash Conversion Cycle (CCC).

RESEARCH METHODOLOGY

The procedure using, which researcher go about their work of describing, explaining and predicting phenomena is called Methodology. Methods comprise the procedure used for generating, collecting and evaluating data. Methods are the way of obtaining information useful for assessing explanation.

RESEARCH DESIGN

This study basically follows analytical research methodology to find supporting evidence to current research being done in order to make the work more reliable. Analytical research is a specific type of research that involves critical thinking skills and the evaluation of facts and information relative to the research being conducted. By analytical research method, data and other important facts that pertain to the project is compiled; after the information is collected and evaluated, the sources are used to prove a hypothesis or support an idea.

TYPES OF DATA COLLECTED

Secondary data:

The type of data used in this study is **Secondary data**. The secondary data such as financial statements are verifiable and reliable given they have been audited, so this will diminish any risk in presenting incorrect conclusions from unreliable data.

➤ **Period of Data**

The time period for which data is taken for analysis covers the five financial years from 2013 to 2017.

➤ **Sources of Data**

- Balance sheets
- Income Statements
- Journals and Books published by the Company
- Research Articles and journals on Supply Chain Finance

DATA ANALYSIS AND INTERPRETATION

Research Tools

- Ratio analysis
- Trend analysis
- One sample T- test
- Correlation Analysis

FINANCIAL ANALYSIS

TABLE SHOWING RETURN ON SALES

YEAR	NET INCOME (in crs)	NET SALES (in crs)	ROS
2013	28.1	196.76	0.1428
2014	42.64	268.53	0.1587
2015	54.77	290.78	0.1883
2016	85.09	361.23	0.2355
2017	96.18	386.42	0.2489

Interpretation:

It is observed that there is a steep increase in the return on assets over the past five years which indicates that the company's activities are more effective and profitable.

TABLE SHOWING CASH CONVERSION CYCLE

Year	DIO	DSO	DPO	CCC
2013	21.74	55.66	76.58	0.821
2014	20.31	58.80	73.059	6.065
2015	33.93	73.87	68.26	39.54
2016	39.64	64.70	53.49	50.86
2017	71.24	67.22	81.22	57.24

Interpretation: It is observed that Igarashi has drastically improved its cash conversion days over the 5 years, which suggests inefficiency of the company which determines that working capital management is not good.

TABLE SHOWING RETURN ON INVESTED CAPITAL

YEAR	NET INCOME	DIVIDENDS	TOTAL CAPITAL	ROIC
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	(in crs)	(in crs)	(in crs)	
2013	28.1	0	20.37	1.3794
2014	42.64	0	20.39	2.0912
2015	54.77	0	20.42	2.6821
2016	85.09	9.13	30.45	2.4945
2017	96.18	13.62	30.16	2.7374

Interpretation:

It is observed that return on invested capital has been increasing significantly from the year 2013-2017 with a slight decrease in the year 2016; this indicates that the company has been able to deploy capital efficiently, and generates an attractive return.

TABLE SHOWING WEIGHTED AVERAGE COST OF CAPITAL VALUES:

YEAR	Weighted Average Cost of Capital
2013	0.4767
2014	0.2635
2015	0.3404
2016	0.3281
2017	0.0805

Interpretation:

It is observed that WACC has decreased significantly from 0.476 to 0.08 which indicates the efficiency of the company over the past five years i.e., from 2013-2107 though an increase is observed the year 2016.

TREND ANALYSIS:**TABLE SHOWING TREND VALUES:**

YEAR	WACC	ROIC
2013	0.4767	1.37948

2014	0.2635	2.091221
2015	0.3404	2.682174
2016	0.3281	2.494581
2017	0.0805	2.7374
2018	0.0795	2.882048

Interpretation: The trend value of ROIC and WACC is forecasted through time series analysis as 2.88 and 0.0795. Overall the trend line indicates that the returns on capital are higher than its cost which is favorable to the company.

CORRELATION ANALYSIS

TABLE SHOWING WACC and ROIC:

YEAR	WACC	ROIC
2013	0.476710348	1.37948
2014	0.263552928	2.091221
2015	0.340410695	2.682174
2016	0.328172639	2.494581
2017	0.080514544	2.737401

TABLE SHOWING CORRELATION:

Correlations

		ROIC	WACC
ROIC	Pearson Correlation	1	-.711
	Sig. (2-tailed)		.178
	N	5	5
WACC	Pearson Correlation	-.711	1
	Sig. (2-tailed)	.178	
	N	5	5

Interpretation:

It is observed that value of correlation co-efficient is -.711 which is greater than 0.05, hence we can find a very strong relationship between WACC and ROIC which is negative in nature.

TABLE SHOWING ONE- SAMPLE TEST:

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ROA	10.982	4	.000	.19328300	.1444159	.2421501
ROE	21.333	4	.000	.39516480	.3437352	.4465944
ROS	11.604	4	.000	.48960880	.3724647	.6067529
ROIC	9.059	4	.001	2.27692000	1.5790463	2.9747937
CCC	2.666	4	.036	30.90787280	-1.2842783	63.1000239

Interpretation: The significance of ROA, ROE, ROS, ROIC, CCC is observed to be less than 0.05, therefore we reject null hypothesis and accept alternative hypothesis that all these indicators have a significant impact on supply chain finance.

FINDINGS & SUGGESTIONS:

FINDINGS

- ☉ Return on Assets has been increased significantly 72.27% from the year 2013-2016 but has experienced a fall of 7.62% low return on assets compared with the industry average indicates inefficient use of company's assets. Conversely, a decreasing trend means that profitability is deteriorating.
- ☉ ROIC of the company seems to increase 94.43% from 2013-2015, suggests that a company has been able to deploy capital efficiently, and generates an attractive return, but a sudden fall is experienced in the year 2016 which indicates poor capital allocation. However, an increase of 9% from 2015 -2016 is also observed.

- ⊙ Time series analysis predicts the trend that WACC of the company tends to decrease for every year as the ROIC of the company keeps increasing which indicates that the company creates value to both stakeholders and its shareholders.
- ⊙ Correlation analysis predicts that there is a strong negative relationship which is - 7.11 between WACC and ROIC in determining the Supply Chain Finance of the company.
- ⊙ One Sample test on ROA. ROA, ROS, ROIC CCC indicates that these variables have a significant impact on supply chain finance performance of the company.

SUGGESTIONS

- ⊙ The company can secure longer payment terms and improve their Days Payable Outstanding (DPO). With longer payment terms, companies can also enhance their working capital and cash flow levels.
- ⊙ Greater Discount Capture method can be adopted by the company by which many suppliers offer discounts for paying invoices early, usually a 2 percent discount for paying invoices within 10 days. These discounts add up quickly and can account for an annual percentage rate of return of 36 percent which will reduce the DPO significantly.
- ⊙ Management can reduce receivable days by factoring. Factoring refers to the sale of accounts receivables to a third party at a discount. By factoring its receivables are removed from the balance sheet and receivable days are reduced.
- ⊙ Buying and warehousing inventory ties up cash and increases the cash conversion cycle period. However, by converting to a build-to-order business model the company could tie up less of their cash and reduce the amount of time their products and materials are sitting in a warehouse.
- ⊙ To improve ROA the company can reduce inventory costs by managing the levels of inventory to reflect its sales expectations. Excessive inventory can raise asset costs without producing more income. It can also reduce equipment costs by renting or leasing equipment. This allows it to keep only equipment needed when it needs it, instead of buying a piece of equipment that may sit idle when the needs change.

CONCLUSION

This paper studies the application of the SCF program in supply-side value chain management, containing the cost saving financial strategy and cash flow optimization. The EVA model in connection to the features of the SCF program provides the theoretical foundation of selecting FSCM performance indicators and profitability ratios. CCC, ROIC, WACC are selected to conduct the cross-sectional estimation. Including CCC other selected indicators do show the significant effects on the development on profitability. The structured linear models of ROIC, ROE and ROA are significant in dependence on the selected indicators. ROIC and WACC are negatively correlated to profitability. Implementing suggestions like Capturing discounts, electronic invoicing facilities and distributing idle cash to shareholders would help the company in optimizing its supply chain activities throughout the value chain which would impact on its financial performance in a positive manner.

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IMPACT OF CORPORATE SOCIAL RESPONSIBILITY IN SHIPPING COMPANIES-AN EMPIRICAL STUDY

***Dr.D.Rajasekar**

ABSTRACT

This research paper tries to analyze the study of CSR status in the shipping industry; this can give insight to what extent companies can follow the CSR. Corporate social responsibility allows organizations to do their bit for the society, environment, customers or for that matter stakeholders. With the increasing need for economic development across the globe, the CSR activities in the corporate affairs are regarded as a very important practice for shipping companies in India due to impact of increased revenue and also in ethical consideration. This paper aims to discuss the implementation, impact and new challenges that are being adapted to enhance standards and the requirements of corporate social responsibility in shipping companies.

Keywords: Corporate Social Responsibility, Impact, and Shipping sector

INTRODUCTION

The shipping industry' implies the industry that arrangements with transportation of cargo and passengers through the seas utilizing real ships. Moreover, 'shipping' takes a more extensive importance: it incorporates the calculated tasks that help the industry, for example, protection and strategic supply chains. With the end goal of this investigation, nonetheless, any calculated parts of shipping, on land or noticeable all around, are not considered as a major aspect of the shipping industry. The flourishing of the world economy would be totally inconceivable without boats and seafarers; the shipping industry encourages the transportation of roughly 90 for each penny of the world's exchange by volume through the seas.

OBJECTIVES

- To study the CSR initiatives of shipping companies in India
- To examine the perception of shipping companies employees on CSR activities
- To put forth certain suggestions and conclusions based on the findings that have been arrived.

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REVIEW OF LITERATURE

Corporate social responsibility is one of these emerging trends and it is becoming increasingly accepted in business circles (Gendron and Champlon), to the extent that CSR is most often implemented as a key strategy.

Barnett : CSR is a form of corporate investment characterized by a dual orientation towards the improvement of social welfare and stakeholder relations explains why employees, as a stakeholder group, impact CSR policy. Firstly, employees can act as agents for social change when they push corporations to adopt socially responsible behaviour (Acquitera et al., 2007)

RESEARCH METHODOLOGY

To fulfill aforesaid objectives, that data are collected from both primary data as well as secondary data. The secondary data collected from various journals, books, periodicals, and web. The primary data are collected with support of well designed structured questionnaire, convenient sampling method is employed in selecting the sample. The sample used in the study were different level of employees working in shipping companies, which are located in and around Chennai City of Tamilnadu. The sample size is limit 237. The opinions collected are analysed using a statistical package.

DATA COLLECTION

Data collection is the systematic gathering of data for a particular purpose from various sources, including questionnaires, interviews, observation, existing records and electronic devices.

RESULTS AND DISCUSSIONS

➤ ANOVA

DATA ANALYSIS

The Ten Hypotheses are as follows:

H_{1,1} : Corporate Social Responsibility have a significant impact on Age

H_{1,2} : Workplace policies have a significant impact on Age

H_{1,3} : Community policies have a significant impact on Age

H_{1,4} : Environmental impact have a significant impact on Age

H_{1,5} : Communication Practices have a significant impact on Age

H_{1.6}: Corporate Social Responsibility have a significant impact on Income.

H_{1.7}: Workplace policies have a significant impact on Income

H_{1.8}: Community Policies have a significant impact on Income

H_{1.9}: Environmental impact have a significant impact on Income

H_{1.10}: Communication Practices have a significant impact on Income

TABLE : 1

Results of ANOVA –Age in using Corporate Social Responsibility, Workplace policies,Community policies, Environmental impact and Communication Practices

Variance		Sum square	Df	Mean square	Frequency	Significance
Corporate social responsibility	Between groups	47.641	2	23.820	2.640	.074
	Within groups	2111.625	234	9.024		
	Total	2159.266	236			
Work place Policies	Between groups	3.544	2	1.772	.426	.653
	Within groups	972.389	234	4.156		
	Total	975.932	236			
Community Policies	Between groups	30.413	2	15.206	3.723	.026
	Within groups	955.646	234	4.084		
	Total	986.059	236			
Environmental impact	Between groups	52.994	2	26.497	3.747	.025
	Within groups	1654.812	234	7.072		

	Total	1707.806	236			
Communication Practices	Between groups	17.978	2	8.989	1.008	.366
	Within groups	2086.477	234			
	Total	2104.456	236			

**** Significant at 1% level**

*** Significant at 5% level**

Analysis:

It can be seen from that table that the p value is no significant at the 0.5 % level of features and age, corporate social responsibility, Workplace Policies, Community Policies, Environmental impact, Communication Practices.

Discussion:

There is no association between ages with respect to perception about corporate social responsibility. There is no association between ages with respect to perception about Workplace Policies. There is a significant difference between ages with respect to perception about Community Policies. There is a significant difference between ages with respect to perception about Environmental impact. There is no significant difference between ages with respect to perception about Communication Practices.

TABLE : 2

Results of ANOVA –Income in using Corporate Social Responsibility, Workplace policies,Community policies, Environmental impact and Communication Practices

Variance		Sum square	Df	Mean square	Frequency	Significance
Corporate social responsibility	Between groups	74.742	2	37.371	4.195	.016
	Within groups	2084.523	234	8.908		
	Total	2159.266	236			

Work place Policies	Between groups	56.877	2	28.438	7.241	.001
	Within groups	919.056	234	3.928		
	Total	975.932	236			
Community Policies	Between groups	56.020	2	28.010	7.047	.001
	Within groups	930.039	234	3.975		
	Total	986.059	236			
Environmental impact	Between groups	62.360	2	31.180	4.434	.013
	Within groups	1645.446	234	7.032		
	Total	1707.806	236			
Communication Practices	Between groups	108.952	2	54.476	6.388	.002
	Within groups	1995.503	234			
	Total	2104.456	236			

**** Significant at 1% level**

*** Significant at 5% level**

Analysis:

It can be seen from that table that the p value is no significant at 0.5% level for features and income, corporate social responsibility, Workplace Policies, Community Policies, Environmental impact, Communication Practices.

Discussion:

There is a significant difference between incomes with respect to perception about corporate social responsibility.

There is a significant difference between incomes with respect to perception about Workplace Policies. There is a significant difference between incomes with respect to perception about Community Policies. There is a significant difference between incomes with respect to perception about Environmental impact. There is a significant difference between incomes with respect to perception about Communication Practices.

SUGGESTIONS

- The Industry needs a long-term vision and strategy in terms of Corporate Social Responsibility (CSR) for effective implementation across its sectors. The focus should shed equally on improving both its environmental and social performance.
- Further research regarding Corporate Social Responsibility (CSR) barriers that industry need to overcome for a widespread adoption of Corporate Social Responsibility (CSR) is required.
- The employees need to develop their skills through training plans.
- A process for the development of Corporate Social Responsibility (CSR) standards exclusively for shipping, including standardization of the environmental performance
- Industry needs to move forward on Corporate Social Responsibility (CSR) and expand its focus from the company level to the industry level. Therefore, industry stakeholders are advised to address key challenges with the aim to raise awareness and contribute to a global industry framework for effective Corporate Social Responsibility (CSR) implementation.

CONCLUSION

Despite their importance, seafarers and their rights have, for quite a while, been ignored by the shipping industry. Although the shipping industry has many stakeholders to take care of, seafarers are maybe the most imperative of all. Seafarers are the principle motors in the shipping industry; they invest, the greater part of their energy in board ships and far from their homes and families. Shipping companies over the globe are continually cutting working expenses by enlisting shabby and incompetent teams, with fluctuating degrees of maritime wellbeing and security preparing. The race to enroll modest and incompetent seafarers, has prompted many negative social consequences for seafarers, for example, low pay, weak mind, "obligated subjugation", boycotting, operator expenses, abandonment and arraignment. The Corporate Social Responsibility (CSR) of the shipping industry is for the most part winding up in the shipping companies' books with almost no useful consequences for the welfares of the seafarers who chance their lives for the boats proprietors' private

benefits. The industry blames for not doing much above the minimum standard set by the IMO and ILO. This is contrary to the Corporate Social Responsibility (CSR) philosophy, which requires companies to go beyond the minimum requirements on a voluntary basis. There are many complaints from pressure groups that seafarers are going beyond their normal responsibilities. This puts them in the line of fire from maritime criminals, mostly pirates and armed robbers. This study suggests that more has to be done in shipping companies' Corporate Social Responsibility (CSR) policies to protect seafarers and their families when disasters happen at sea.

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**A COMPARATIVE STUDY ON INDUSTRIAL RELATIONS IN LEADING
CORPORATE RETAIL ORGANIZATIONS IN VISAKHAPATNAM, ANDHRA
PRADESH, INDIA**

***Dr. Malisetty Venkata Suryanarayana **Dr. Vijaya Rudraraju**

ABSTRACT

An organization can see its success based on its relations with all of its stakeholders. Industrial relations is a socio-dynamic process. Good relations always create a healthy environment either in the family or in business. Especially in business, organizations need to maintain good relations with the inside and outside stakeholders. First it should win the hearts of its internal stakeholders next the ones that are outside, without which it will not be possible to run the organization successful. It is an art of living together for the purpose of production, productive efficiency, human well being and industrial progress. With this important view, the researcher has taken up the current study to enquire about the relations between employee and employer in corporate retail sector of the city of Visakhapatnam.

Keywords: Industrial Relations, Stakeholders.

1. Introduction:

Industrial Relation is concerned with the relationship between management and employee and other stakeholders connected to the organization. Organizations should have their own mechanism to know the satisfaction levels of its stakeholders to maintain good relations, especially with its employees. An industry is a social world in miniature where an association of variety of people like employers, executives and supervisory personnel and workmen interact and create a relationship known as industrial relations. This association of people not only influences labor relations but also the social, economic, political and moral lives of the whole community. In other words, industrial life creates a series of social relationship which regulate the relation and working of a wide variety of people either directly, indirectly or both. Thus industrial relations are a part and parcel of industrial life.

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2. **Research Questions:** The current study was carried out in search of empirical answers to the following research questions that are raised based on the gaps identified in literature related to the retail industry in India and abroad and the research objectives formulated.

- 1) What are the measures followed in maintaining cordial interpersonal relations?
- 2) Are the subordinates allowed to express their views freely with the superior?
- 3) Are the employees encouraged to experiment with new method and new creative ideas?
- 4) How is the team spirit among the employees?
- 5) How is the mutual trust among the employees?

3. **Objectives of the Study:**

Based on the above questions, the following objectives have been framed to carryout research.

1. To examine the perception of employees on Industrial Relations (IR) in corporate retail sector.
2. To compare the climate of Industrial Relations between selected three corporate retail organizations of Visakhapatnam
3. To evaluate the IR Climate based on organization and sample characteristics of select employees.

4. **Hypothesis of the Study:**

Based on objectives of the study, the following hypothesis has been formulated.

H₀1: There is no significant difference in the perception of select employees on IR Climate in the select three corporate retail organizations.

H₀2: There is no significant difference in the IR Climate based on organization and sample characteristics of select employees.

5. **Research Methodology and Sampling**

A questionnaire has been prepared to study the IR Climate in the corporate retail sector. For the purpose of administering the questionnaire, a sample of 300 respondents has been selected on the basis of random sampling method. The sample consists of Customer Sales Associates, Supervisors, Assistant Managers and Managers of corporate retail organizations. The method, therefore, consists of identifying some specific variables, for developing hypotheses, collecting data via a survey through a predetermined questionnaire

which can be statistically tested in support of the hypotheses or otherwise. The period of study spans ten years from 2008 to 2017. The data have been analyzed with the help of appropriate statistical techniques by using SPSS-17.0. The researcher had put an attempt to analyze the relationship between the independent variables (gender, age, education, social status) and dependent variables (IR Practices). Appropriate hypotheses have been framed for the purpose of testing.

6. Literature Review

Maurizio Curtarelli, et al., (2014), mention that with reference to industrial relations, the impact of the crisis has influenced actors, processes, and outcomes. Regarding working conditions, the results appear to be in line with the literature on the topic, which relates the crisis to an increase in job insecurity, a decrease in work intensity, in working hours, and in anti-social working time arrangements, and a general improvement in terms of health risks and related outcomes. Jeffrey S. Rothstein. (2013)states that firms tailor their lean production systems to take advantage of local cultural, industrial and labor relations environments to enhance productivity and at specific worksites. The study analyses the HR Policies practiced by General Motors and their suppliers in Silao, Mexico to identify two local innovations to the automaker's lean production system. *Nini Yang (2013)*examined in his study on key issues such as cultural values, different concepts and ideologies about the labor movement, and unions' responses to economic globalization, privatization, and market liberalization, which tend to undermine their bargaining power and recruitment.*Rani P. Suseela and P. Srinivas Subba Rao (2012)*,mentioned that sound industrial relations in jute industry increased the productivity from mental happiness of employees.The study also states that mental happiness of an employee in turn is a function of welfare facilities provided by the employer.*Edmund Heery, Brian Abbott, Stephen Williams (2012)* examines the involvement of civil society organizations (CSOs) in UK industrial relations. They confirmed that civil society organizations have become increasingly active in the sphere of work and employment and operate at multiple levels of the industrial relations system and interact with the state, employers and trade unions.*Christopher O. Chidi and Oluseyi A. Shadare (2011)*, investigates the influence of host community on industrial relations practices and policies using Agbara community and Power Holding Company of Nigeria(PHCN) PLC as a case. They also suggested the inclusion of the host community as one of the actors in industrial relations.

*Bruce Kaufman (2010)*ascertains the theoretical and policy foundation for the field of industrial relations where labor is personified in human beings and is not a commodity and

argues that the field's two central dependent variables are labor problems and the employment relationship. The study confirmed that certain amount of labor protectionism promotes economic efficiency and human welfare. *Kan Wang (2008)* studied the evolution of Chinese industrial relations after the market reform of 1978, while basing its arguments and conclusion on analysis of the interactions of key actors in the labor arena in China. Atif Anis, et al., (2007) studied on "employee retention relationship to training and development: A compensation perspective" and concluded that employee retention is a critical aspect for every company regarding competitive advantage because human resource is the most critical asset of today's modern world. Howard Gospel and Tony Edwards. (2012), analyzed the institutional domains of industrial relations and industrial training in the United Kingdom. It analyses the trajectory and magnitude of change, seen in terms of (a) forms of coordination/governance and (b) the saliency of these domains. According to Wenxue Lu & Jishuang Wang (2017), conflicts between owners and contractors will greatly affect their relationship quality, thereby affecting the performance of the assignment. John Purcell. (2018).

7. Research Gap:

The previous studies have not covered the practices of industrial relations in retail sector in India. Based on the gap identified, the present study has been taken up. It is an empirical and critical study which makes certain observations on the industrial relations in corporate retail sector.

The following dependent variables have been taken up for the current study.

Table 1: Details of Dependent Variables

Variables	Questions / Statements
DV1.	Relations between superior and subordinates
DV2.	Existence of cordial relationship between superior and subordinate
DV3.	Superior has a very helpful nature
DV4.	Employees were not afraid to express their feelings with superiors
DV5.	Employees are encouraged to experiment with new method and new creative ideas

DV6.	Co-employees work with team spirit
DV7.	Co-employees readily extend their help when required
DV8.	Trust on co-employees is good

8. Perception of Employees on industrial relations in Retail Sector: A culture of trust and credibility between the employer and employee has a direct influence on the IR climate created at the work place. The perception of employees on eight select variables (V1 to V8) of industrial relations is discussed and presented as follows:

(DV1) Relation with boss/superior: The HR Department plays an important role both in terms of training and coaching the employees on how effectively the association among the employees can be established. The subordinates should have good relations with the boss to attain the goals of the organization. This dependent variable helps us to know the relations between superior and subordinates in the retail sector.

(DV2) Existence of cordial relationship between superior and subordinate: It is a fact that in any organization, communication arises between members of several hierarchical positions. Superior-subordinate communication refers to the interactions among organizational leaders and their subordinates and how they work together to achieve personal and organizational goals. Satisfactory upward and downward communication is needed for a successful business as it closes the gap between superiors and subordinates by increasing the level of trust, support and the frequency of their interaction. This dependent variable helps us to know the relationship between superiors and subordinates in the retail sector.

(DV3) Superior has a very helpful nature: An important contribution to a decent work environment comes from the superiors in the organization, whose expertise in resolving conflict has a bearing on the motivation of employees to engage in responsible and efficient work (Marjan Tkalcic, 2012). Good relationship and a proactive attitude between team members is a prerequisite for innovative and creative work of an individual. This dependent variable brings the facts about superior's helping nature towards his/her subordinates.

(DV4) Employees were not afraid to express their feelings with superiors: There is no doubt that the strength of any organization is a free flow of communication from top to bottom and bottom to top. Top management should create an environment to express the views of all the employees for the organization's benefit.

In view of this important aspect, this variable helps us to know the encouragement of superiors for free flow of communication with their subordinates.

(DV5) Employees are encouraged to experiment with new method and new creative ideas: Organizations need to make continuous experiments to meet the needs and wants of the end customers. In this process, organizations need to encourage all employees to innovate new products or services, to retain the existing customers and attract new customers. The creative ideas will bring sometimes huge profits to the organization. The corporate retail stores have come from this concept only as consumers can buy all types of goods and services at one place. Today, corporate retail sector is introducing new kinds of services to its customers which bring them more and more profits. The present dependent variable helps us to know the encouragement of the top management provided to its employees to experiment new innovative ideas in corporate retail sector.

(DV6) Co-employees work with team spirit: “Team required tasks make a tangible contribution to the organization and are consistent with the team’s purpose, abilities and attitudes. Tasks need to be sufficiently motivating for team members to share responsibility and accountability for achievement” (*Sundstorm. E, De Meuse K.P., 1990*). The team members must recognize and value their contributions to the team and individuals should trust and respect contributions of their colleagues.

(DV7) Co-employees readily extend their help when required: The actual workforce is the key driver for any effective organization. ‘*Successful teams are unified because team members work helpfully, sharing common goals as well as the resources to achieve them*’. With this important view, an attempt has been made to know whether there is a healthy atmosphere amongst the respondents to support each other and attain mutual goals of the organization or not.

(DV8) Opinion of Respondents on trust on co-employees is good: In the retail organization, team building is an ongoing procedure which aims to help a work group in improvement in efficiency. ‘*The team members cannot only share their expectations for achieving group tasks, but trust and support one another and respect one another’s individual differences*’. It is fairly common that the best active team leaders build the faith and reliability rather than fear between team members. The present dependent variable brings out the facts about the trust existing among the employees working in corporate retail sector.

Results of the Study:

In this present study, the relationship between Independent Variables (IV) (Gender, Age, Education, Social Status) and Dependent Variables (DV1-DV8) of industrial relations practices has been analyzed. The results of relationship between these two variables have been mentioned in Table 2.

Table 2 : The Cumulative Results of Relationship between the Variables

Variable s		DV1	DV2	DV3	DV4	DV5	DV6	DV7	DV8
Gender (IV-1)	<input type="checkbox"/> <input type="checkbox"/>	3.22	2.14	1.31	2.10	1.77	2.35	3.25	3.28
	H ₀	A	A	A	A	A	A	A	A
Age (IV-2)	<input type="checkbox"/> <input type="checkbox"/>	16.03*	18.07*	25.04* *	19.54*	32.80* *	34.17* *	25.39* *	24.85* *
	H ₀	R	R	R	A	R	R	R	R
Educatio n (IV-3)	<input type="checkbox"/> <input type="checkbox"/>	60.11* *	35.88* *	49.31* *	45.42* *	67.76* *	53.33* *	45.43* *	45.29* *
	H ₀	R	R	R	R	R	R	R	R
Social Status (IV-4)	<input type="checkbox"/> <input type="checkbox"/>	12.21	6.10	9.25	8.80	5.26	8.68	7.70	7.12
	H ₀	A	A	A	A	A	A	A	A
Column headings are: (1) <input type="checkbox"/> <input type="checkbox"/> Chi Square; (2) H ₀ =Null Hypothesis Accepted (A) or Reject (R); (3) R=Rejected (4) * Significant at 5% level; ** (5) Significant at 1% level. (6) Dependent Variable (V)									

It is found that there is no significant difference in opinion between male and female respondents on the Variables (V1 to V8), it is also same in the case of social status of the respondents. The results based on age and educational qualifications of respondents state that the opinion of respondent employees is not similar.

It is evident from the results that there are different views of employees on the practice of industrial relations in corporate retail organizations.

1.9 Cross-sectional Analysis of IR Practices: Cross-sectional analysis is a research method often used in developmental psychology, and also utilized in many other areas including social science and education. This type of study utilizes different groups of people who differ in the variable of interest, but share other characteristics such as socioeconomic status, educational background, and ethnicity. Sample employees are classified according to “Gender, Age, Educational Qualifications, and Social Status” to know their perception about IR Practices. The total number of employees selected was 300, of which 110 employees are from *more*, 63 employees are from *Spencer’s* and 127 employees are from *Central* drawn for the study. The cross-sectional results analysis is presented as follows:

1.9.1 Female and Male employees do not perceive the IR Climate differently: With the increase of women literates and their exposure to management and technical education, the confidence level of women has increased and also hardworking nature and dedication of women towards work made them to compete with their male counterparts. The present study gives an importance to women employees by including them in the sample from the select organizations. Usually, the views of women and men differ significantly. In order to assess this, F-test has been carried out in this study. Table-1.2(a) provides the descriptive statistical information like Mean, GM, SD and SE. The ANOVA results are presented in the Table-1.2(b).

Table 3(a): Gender wise Evaluation of Perception towards IR Practices of three CROs.

Gender	Number	Mean	SD	SE
Male	176	28.64	4.130	0.311
Female	124	28.23	4.367	0.392
Total	300	28.47	4.227	0.244

Table-3 (b): ANOVA Results of IV-01

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Between	12.120	1	12.120	0.678	0.411

Groups					
Within Groups	5330.667	298	17.888		
Total	5342.787	299			

From the Table 3(a) it is clear that, the mean values of perception of male and female employees on IR Climate are 28.64 and 28.23 respectively. According to their opinion, the IR Climate in the select organizations is more or less similar. The SD value of IR Climate of male employees (4.130) is lower than female employees (4.367). To test the significant difference among the sample means, analysis of variance was applied. This was done to test the significant difference between two variables. The analysis was done for this factor and it was observed from the Table 3(b) that the probability is greater than 0.05 at 5% level of significance with one degree of freedom. *The null hypothesis is accepted.* Hence, it is concluded that there is no significant difference in the perception of male and female employees on IR Climate in the select CROs.

1.9.2. Employees of different age groups do not perceive IR Climate differently.: Any organization needs efficient and dynamic workforce in the productive age group. It is an important variable because it has direct relation with one's mental maturity and the consequent awareness about what is going on in the society. The distribution of employees based on different age groups helps us to understand the different types of perceptions. The intention about this type of distribution is to get the opinion of all age groups regarding IR Climate maintained by the three select Corporate Retail Organizations. In order to evaluate the IR climate based on various groups of employees, F-test has been carried out in the present study. Table 4(a) provides the descriptive statistical information like Mean, GM, SD and SE. The ANOVA results are presented in the Table 4(b).

Table 4(a): Age-wise Evaluation of Perception towards IR Practices

Age	Number	Mean	SD	SE
Below 20 years	54	27.20	5.225	0.711
20-30 years	227	28.75	3.937	0.261
30 years and above	19	28.79	3.994	0.916
Total	300	28.47	4.227	0.244

Table 4(b): ANOVA Results of IV-02

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Between Groups	106.182	2	53.091	3.011	0.051
Within Groups	5236.604	297	17.632		
Total	5342.787	299			

From the Table 4(a) it is clear that, the mean value of perception(28.79) of 30 years and above age group employees is high and hence can be inferred to be having higher satisfaction level with IR Climate than the other age group employees. The mean satisfaction level of below 20 years age group respondents (27.20) is lower with IR Climate of three select CROs. The mean satisfaction levels of 20-30 years age group and 30 years and above age group of respondents are greater than Grand Mean Value (28.47).

The value of SD is varying between 3.937 and 5.225. To test the significant difference among the sample means, ANOVA was applied. This was done for testing the significant difference between two variables. It was observed from the Table 4(b) that the probability value is equal to 0.05 at 5% level of significance with two degrees of freedom. *The null hypothesis may be rejected.* Hence, it is concluded that the different age groups of employees perceive the IR Climate differently.

1.9.3 Employees of different educational status do not perceive IR Climate differently

: Education is considered to be the chief means of social awareness and development. Education makes people rational thinkers.

Education enlightens human beings towards their work as well as responsibilities. In general, education increases the knowledge and understanding power of the people. Different levels of education will develop different types of perception and analyzing skills in the employees and this type of distribution of the employees will bring out different types of opinions on Recruitment and Selection Practices of three select CROs. In order to evaluate the perceptions of employees regarding IR Climate, F-test has been carried out in the present study. Table-5(a) provides the descriptive statistical information like Mean, GM, SD and SE. The ANOVA results are presented in the Table-5(b).

Table 5(a): Educational qualification-wise Evaluation of Perception towards IR Practices

Education	Number	Mean	SD	SE
Elementary	16	24.31	5.606	1.402
Secondary	82	28.32	4.861	0.537
Intermediate/Diploma	127	28.31	4.227	0.375
Graduation	75	29.80	1.986	0.229
Total	300	28.47	4.227	0.244

Table 5(b): ANOVA Results of IV-03

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Between Groups	414.191	3	138.064	8.292	0.000
Within Groups	4928.595	296	16.651		
Total	5342.787	299			

From the Table 5(a) it is clear that, the mean value of graduate employees (29.80) is greater than the GM value (28.47). The value of SD is varying between 1.986 and 5.606. To test the significant difference among the sample means, ANOVA was applied. This was done for testing the significant difference between two variables. The analysis was done on this factor and it was observed from the Table 5(b) that the probability value is less than 0.05 at 5% level of significance with three degrees of freedom. *The null hypothesis is rejected.* Finally, it is inferred that the employees' satisfaction level is different on the IR Climate in select three CROs.

1.9.4 Employees with different social status do not perceive IR Climate differently: In order to evaluate IR Climate among the employees based on their social status; F-test has been carried out in the present study. Table 6(a) provides the descriptive statistical

information like Mean, GM, SD, and SE. The ANOVA results are presented in the Table 6(b).

Table 6(a): Social Status wise Evaluation of perception towards IR Practices of three CROs

Social Status	Number	Mean	S.D.	S.E
Forward Caste (FC)	88	28.33	4.228	0.451
Backward Caste (BC)	159	28.67	4.113	0.326
Scheduled Caste (SC)	48	27.94	4.787	0.691
Scheduled Tribe (ST)	5	30.00	1.000	0.447
Total	300	28.47	4.227	0.244

Table 6(b): ANOVA Results of IV-04

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	P-Value
Between Groups	33.198	3	11.066	0.617	0.605
Within Groups	5309.589	296	17.938		
Total	5342.787	299			

From the Table 6(a) it is evident that, the mean values of ST (30.00) and BC (28.67) group respondents are greater than the GM value (28.47). The value of SD is varying between 1.000 and 4.787. To test the significant difference among the sample means, Analysis of Variance was applied. This was done for testing the significant difference between two variables. The analysis was done on this factor and it is observed from the Table 6(b) that the probability value is more than 0.05 at 5% level of significance with three degrees of freedom. *The null hypothesis is accepted.* Hence, it is concluded that there is no significant difference in the perception of respondents based on their social status.

1.10 Testing of Hypotheses:

There are differences in the opinion of employees on IR Climate in Corporate Retail Organizations. The summary of the hypotheses tested in this chapter is presented as follows:

Table 7(a): (H₀1) Perception of Employees on Variable V1 to V8

(1)	IR Climate	IV: Gender		IV: Age		IV: Education		IV: Social Status	
		(2)	(3)	(2)	(3)	(2)	(3)	(2)	(3)
V1.	Relation with boss/superior								
V2.	Cordial Relations exist between Superiors and Sub-ordinates in our organization	N	A	Y	R	Y	R	N	A
V3.	My superior is very helpful	N	A	Y	R	Y	R	N	A
V4.	Employees are not afraid of expressing their feelings with the superiors	N	A	N	A	Y	R	N	A
V5.	Employees are encouraged to experiment with new method and new creative ideas	N	A	Y	R	Y	R	N	A
V6.	My Co-employees work with team spirit.	N	A	Y	R	Y	R	N	A
V7.	My co-employees readily extend their help when required	N	A	Y	R	Y	R	N	A
V8.	I trust my co-employees in my organization	N	A	Y	R	Y	R	N	A
Column headings are: (1) Variables; (2) Significance Difference (N=No, Y=Yes); and (3) Null Hypothesis Reject (R) or Accept (A); IV (Independent Variables)									

**Table-7(b): (H₀2) Comparison, Cross-sectional Evaluation and
Analysis of IR Practices**

Sl. No.	Null Hypothesis (H₀)	F- Value	P- Value	Accept/ Reject
01.	Three CROs do not differ on IR Practices	9.759	0.000	R
02.	Female and male employees do not perceive differently IR Practices	0.678	0.411	A
03.	Different age group of employees does not perceive differently IR Practices	3.011	0.051	R
04.	Different educational status of employees does not perceive differently IR Practices	8.292	0.000	R
05.	Different social status of employees does not perceive differently IR Practices	0.617	0.605	A

1.11 Conclusion: The important conclusions drawn from the study are:

1. The majority of employees were agreeing with the variables V1 to V8.
2. The cross-sectional analysis concludes that the perception towards IR Practices of employees with different gender and social status is same.
3. The other personal characteristics of the employees' such as age and education seem to have an impact on the perception of employees towards the IR practices of the CROs.

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A STUDY ON EFFECTIVENESS OF MOTIVATIONAL LEVEL OF EMPLOYEES AT LARSEN & TOUBRO (L&T) CONSTRUCTION

***N.Dhanasri**

ABSTRACT

In this project about “**A STUDY ON EFFECTIVENESS OF MOTIVATIONAL LEVEL OF EMPLOYEES AT LARSEN & TOUBRO (L&T) CONSTRUCTION**” The main objective of the study is to identify the different methods of motivation to the employees of L&T Construction and find out the level of satisfaction towards the present motivation techniques, as it is understood that motivated employees are more likely to produce a superior quality product or service than those who lack the essential of motivation. All in all motivation refer to a person’s desire to do the best possible job or to exert the maximum effort to perform the assigned task.

The type of research used for this study is descriptive study. The descriptive research is based on real fact finding where the data collection is based on primary and secondary data. The primary data collected through a structure questionnaire where questionnaire like open ended, multiple choices and close ended are used. The secondary data are collected through newspapers, magazines, websites etc.,

The sample size determined as 100 employees of designer engineers from a total population are 200 employees in L&T Construction. A simple random techniques is used to collect the Data. The collected data are arranged in the form of table and chart which are analyzed used chi-square, correlation and Independent sample T-Test. These analyzed data are used to frame findings, suggestions and conclusion.

1.1 INTRODUCTION

Motivation – derives from the Latin word mover, meaning, ‘to move’.

1. The internal condition that activates behavior and gives it direction.
2. The psychological process that gives behavior purpose and direction.

3. The set of forces that causes people to engage in one behavior rather than some alternative behavior.

The efficiency of a person depends on two factors, firstly, the level of ability to do a certain work, secondly, the willingness to do the work. So far as the first factor is concerned it can be acquired by education and training, but the second factor can be created by motivation. A person may have several needs and desires. It is only strongly felt needs which becomes motivate. Thus motives are a product of needs and desires motives are many and keep on changing with time motives are invisible and directed towards certain goals.

Motivation means that process which creates on inspiration in a person to motivation is derived from the word 'motive' which means the latest power in a person which impels him to do a work.

Motivation is the process of steering a person's inner drives and actions towards certain goals and committing his energies to achieve these goals. It involve a chain reaction starting with felt needs, resulting in motives which give rise to tension which census action towards goals. It is the process of stimulating people to strive willingly towards the achievement of organizational goals motivation may be defined as the work a manager performs an order to Induce Subordinates to act on the desired manner by satisfying their needs and desires. Thus motivations is concerned with how behave gets started, is energized, sustained and directed.

1.2 OBJECTIVES OF THE STUDY

Primary Objective:

To study on Effectiveness of motivational level of employees in Larsen & Toubro (L&T) Construction.

Secondary Objectives:

- To study the effectiveness of the techniques adopted by the company in employee motivation
- To study about the benefits and facilities provided to the employees.
- To learn the employee's satisfaction on the interpersonal relationship with in the organization.

2. REVIEW OF LITERATURE

Y. Yeh(2014)

“The study aims to analyze the organization culture, career planning, motivation and employee performance at the PDAM (Regional Water Company) in North Sumatera province. This study used a descriptive-explanatory survey method with the sample size of 367 employees selected using stratified random sampling technique from the target population of 4409 employees. Through the effect model of path analysis which consists of causal relationship between variables, it found that organization culture is low, career planning is planned well, while work motivation and employee performance are low. Moreover, the organization culture influenced positively by career planning, career planning influenced positively by work motivation and employee performance, and finally organization culture influenced positively by work motivation and employee performance, both directly and indirectly through career planning”.

M. S. Kumar (2012)

“Employees may be motivated on the job by many things, such as a sense of achievement, recognition, enjoyment of the job, promotion opportunities, responsibility, and the chance for personal growth. Employee motivation and performance are tied directly to the style of management that is applied and to principles of positive or negative reinforcement. It is a positive attitude held by the employees towards the organization and its values. The study is conducted to analyze the existing employee motivation programs for junior and middle level employees”.

Anthony Di Primio, (1988)

What is the most critical productive resource that determines the efficiency and ultimately the success or failure of an organization? The answer is: people. This is almost obvious. What is not obvious is how to get the best out of your employees in terms of the amount of work and the quality of work they consistently give you. Here is how to plan for optimum personnel utilization.

Lyndon Jones, (1978)

Employee surveys, such as a *Job Dimension Survey*, can be useful since they provide a different viewpoint in analysing a job situation (*see Appendix A*). Employee interviews—a representative sample of the work force may be interviewed individually, in pairs, or in small groups.

Critical incident interviewing is used to extract more data about personal responses to work content; this involves getting a person to talk freely about his perception of particularly good or bad work experiences. Adroitness at probing for relevant information takes great care and practice.

3.RESEARCH METHODOLOGY

Research is a systematic method of finding solutions to problems. It is essentially an investigation, a recording and an analysis of evidence for the purpose of gaining knowledge. According to Clifford woody, “research comprises of defining and redefining problem, formulating hypothesis or suggested solutions, collecting, organizing and evaluating data, reaching conclusions, testing conclusions to determine whether they fit the formulated hypothesis”

MEANING

Research is an art of scientific investigation. The advanced learner’s dictionaries of current English lay are down the meaning of research as, “a careful investigation (or) inquiry especially through search for new facts in any branch of knowledge”. According to reedmen and Mary define research as a “systematic effort to gain knowledge”.

RESEARCH DESIGN

A research design is a plan that specified the objectives of the study, method to be adopted` in the data collection, tools in data analysis to be frame hypothesis. “A research design is an arrangement of condition for collection and analysis of data in a manner that aims to combine relevant to research purpose with economy procedure”.

DESCRIPTIVE RESEARCH

A descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation.

Descriptive studies are under taken in smart skills to learn about and describe the characteristics employees regarding training benefits in practiced in the concern.

3.1 Sample Design

A sample design is a finite plan for obtaining a sample from a given population. Simple random sampling is used for this study.

POPULATION

Total no of population in L&T CONSTRUCTION, building & factories is 200 employees.

3.2 Sample Size

Number of the sampling units selected from the population is called the size of the sample. Sample of 100 respondents were obtained from the population.

3.3 SAMPLING TECHNIQUES

The sampling techniques used here is simple random sampling. It is also called an accidental sample. Its most commonly used sampling method in many disciplines-it is the most conveniently available people as study participants.

3.4 METHODS OF DATA COLLECTION

The data's were collected through Primary and secondary data.

PRIMARY DATA

Primary data are in the form of "raw material" to which statistical methods are applied for the purpose of analysis and interpretations. The primary sources are discussion with employees, data's collected through questionnaire.

SECONDARY DATA

Secondary data's are in the form of finished products as they have already been treated statistically in some form or other.

The secondary data mainly consists of data and information collected from records, company websites and also discussion with the management of the organization. Secondary data was also collected from journals, magazines and books.

3.5 STATISTICAL TOOLS USED

To arrange and interpret the collected data the following statistical tools were used.

1. Percentage method.
2. Chi-square analysis.
3. Correlation.
4. Independent sample T-Test

3.5.1 PERCENTAGE METHOD

The percentage method can be extensively to find various given details. It is used to make comparison between two are more series of data .it can be calculated as follows.

$\text{Percentage of respondent} = (\text{No. of respondents} / \text{Total No. of respondents}) \times 100$
--

3.5.2 CHI-SQUARE ANALYSIS

Chi-square analysis in statistics to test the goodness of fit to verify the distribution of observed data with assumed theoretical distribution. Therefore, it is a measure to study the divergence of actual and expected frequencies. It makes no assumptions about the population being sampled. The quantity χ^2 (chi-square) describes the magnitude of discrepancy between theory and observation. If χ^2 is zero, it means that the observed and expected frequency completely coincides. The greater the value of χ^2 , the greater would be the discrepancy between observed and expected frequencies.

The formula for computing chi-square (χ^2) is as follows

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

The calculated value of χ^2 is compared with the table of χ^2 for given degrees of freedom at specified level of significance. If the calculated value of χ^2 is greater than the table value then the difference between theory and observation is considered to be significant. On the other hand, if the calculated value then the difference between theory and observation is not considered to be significant. The degrees of freedom is $(n - 1)$ where 'n' is number of observed frequencies.

3.5.4 CORRELATION ANALYSIS

Correlation analysis is a tool which studies the relationship between two variables, relationship between two variables.

The Spearman correlation, r_s , can take values from +1 to -1. A r_s of +1 indicates a perfect association of ranks, a r_s of zero indicates no association between ranks and a r_s of -1 indicates a perfect negative association of ranks. The closer r_s is to zero, the weaker the association between the ranks.

$$R = 1 - \frac{6 \sum d^2}{n^3 - n}$$

p = coefficient (or) r_s = coefficient

e.g.

p = 0.67 (or) r_s = 0.6

Analysis and discussions

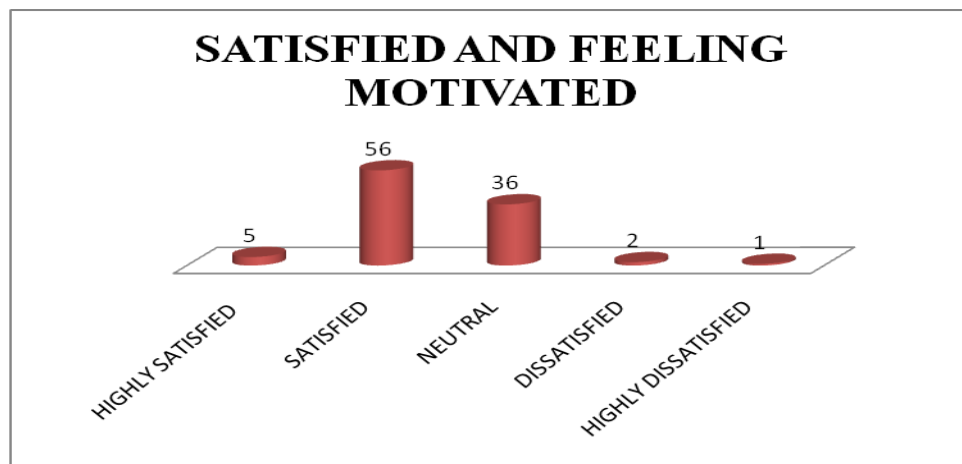
Table : 1 demographic profile of the respondents

Variables with category	Respondents	
	No	percentage
Age		
21-30	44	44%
31-40	49	49%
41-50	7	7%
ABOVE 50	0	0%
Gender		
MALE	79	79%
FEMALE	21	21%
Experience		
0-5 YRS	28	28%
6-10 YRS	42	42%
11-15 YRS	23	23%
ABOVE 15 YRS	7	7%

Table: 2 TABLE SHOWING THE RESPONDENTS ARE SATISFIED AND FEELINGS MOTIVATED IN YOUR CURRENT ROLE

PARTICULARS	RESPONDENTS	PERCENTAGE
HIGHLY SATISFIED	5	5%
SATISFIED	56	56%
NEUTRAL	36	36%
DISSATISFIED	2	2%
HIGHLY DISSATISFIED	1	1%
TOTAL	100	100%

CHART SHOWING THE RESPONDENTS ARE SATISFIED AND FEELINGS MOTIVATED IN YOUR CURRENT ROLE



INTERPRETATION:

From the above chart and table it shows that the 56% of the respondents are SATISFIED and 36% of the respondents are NEUTRAL and 5% of the respondents are HIGHLY SATISFIED and 2% of the respondents are DISSATISFIED and 1% of the respondents are HIGHLY DISSATISFIED.

Table: 3 chi-square analysis to find relationship between age group and carrier goals matches with the company long term goals

Hypothesis:

H0: There is no significance relationship between the age of the respondents and carrier goals matches with the company long term goals.

H1: There is a significance relationship between the age of the respondents and carrier goals matches with the company long term goals.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Goals	163	100.0%	0	0.0%	163	100.0%

Age * Goals Cross tabulation

Count

		Goals		Total
		Yes	no	
Age	21-30	44	0	44
	31-40	72	26	98
	41-50	0	21	21
Total		116	47	163

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	69.911 ^a	2	.000
Likelihood Ratio	82.423	2	.000
Linear-by-Linear Association	59.882	1	.000
N of Valid Cases	163		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.06.

Findings

1. 49% of the respondents are 31-40 and 44% of respondents are 21-30 and 7% of respondents are 41-50
2. 79% of the respondents are MALE and 21% of respondents are FEMALE.
3. 42% of the respondents are 6-10 yrs experience and 28% of the respondents are 0-5 yrs experience and 23% of the respondents are 11-15 yrs experience and 7% of the respondents are above 15 yrs experience
4. 80% of the respondents are YES for career goals matches with the company long term goals and 20% of the respondents are NO
5. 64% of the respondents are VERY GOOD and 25% of the respondents are AVERAGE and 10% of the respondents are EXCELLENT 1% of the respondents are POOR

6. 56% of the respondents are SATISFIED and 36% of the respondents are NEUTRAL and 5% of the respondents are HIGHLY SATISFIED and 2% of the respondents are DISSATISFIED and 1% of the respondents are HIGHLY DISSATISFIED
7. 88% of the respondents are YES for management is taking responsibility on your safety at the work place and 12% of the respondents are NO
8. 56% of the respondents are YES for work life balance is maintained in the organization and 44% of the respondents are NO
9. From the chi-square it was inferred that the calculated value (0.00) is less than significant value of (0.05) therefore H_0 is rejected. Hence there is a significant relationship between age of the respondents and career goals matches with the company long term goals

Conclusion

An organization is effective to the degree to which it achieves its goals. In this sense, human element has a critical importance for organizations in today's competitive business environment. In order to make employees work efficiently and produce beneficial results to the organization, managers have to understand human behaviour. Motivation is an important part of understanding behaviour and is a tool with which managers can use in organizations to make people do what they want. The subject of this study is to investigate the effectiveness of intrinsic and extrinsic factors on employee motivation. The findings of the study reveal that both intrinsic and extrinsic factors affect workers while they achieve their tasks. Another result is that intrinsic factors are more motivating than extrinsic factors. This result agrees with motivation theories and researches. When results compared according to demographic characteristics, no differences were observed. The data was collected only in one company, so this is the main limitation of the study. Therefore one cannot generalize findings to other companies or provinces of the country. This study is meaningful and valuable. Future researchers may focus on the other companies and provinces and then it would be possible to generalize the results.

Suggestion

It is suggested to have a friendly atmosphere which builds confidence at work place. This could be implemented only when the manager has confidence in the subordinates and allows them to work independently. This type of motivation not only creates confidence in themselves but also creates commitment towards the work.

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A study on efficiency of accounts receivable in EFocus Informatix Pvt. Ltd.

***Herbertson Hendry**

ABSTRACT

This study sought to establish how Accounts receivable management tries to minimize the amounts of money tied up in form of accounts receivables and thus takes the organization back to its original set goals. The researcher has to use facts or information already available, and analyse them to make a critical evaluation of the material. This research are comes under analytical.

This study presents the consequences that can result from operating risk to determine the level of accounts receivable in the organisation. The change in the level of accounts receivables in an organisation increases net working capital level and influence costs of holding and managing accounts receivables. The analysis of the project reveals that there is high volatility in extending credit period to customers. The finding of the study have some important implications for the company to provide quality services to clients as well as customers.

INTRODUCTION TO THE STUDY

A sale of credit is an evitable necessity in the business world of today. No business can exist without selling the units in credit. The basic difference between the credit sales and cash sales is the time gap in the receipt of cash.

Management of trade credit is commonly known as Management of Receivables. Receivables are one of the three primary components of working capital, the other being inventory and cash, the other being inventory and cash. Receivables occupy second important place after inventories and there by constitute as substantial portion of current assets in several firms. The capital invested in receivables is almost of the same amount as that invested in cash and inventories. Receivables thus, form about one third of current assets in India. Trade credit is an important market tool. As ,it acts like a bridge form obilization of goods from production to distributions tages in the field of marketing.

It acts no less than a magnet in attracting potential customers to buy the product at terms and conditions favourable to them as well as to the firm. Receivables management demands due consideration not financial executive not only because cost and risk are associated with this investment but also for the reason that each rupee can contribute to firm's net worth.

The book debts or receivable arising out of credit as three dimensions:-

- It involves an element of risk, which should be carefully assessed. Unlike cash sales credit sales are not risk less as the cash payment remains undebated.
- It is based on economic value. The economic value in goods and services passes to the buyer immediately when the sale is made in return for an equivalent economic value expected by the seller from him to be received later on.
- It implies futurity, as the payment for the goods and services received by the buyer is made by him to the firm on a future date.

The customer who represents the firm's claim or assets, from whom receivables or book-debts are to be collected in the near future, are known as debtors or trade debtors. A receivable originally comes into existence at the very instance when the sale is effected.

REVIEW OF LITERATURE

Kerwin, Richard J, (1992), Field Examinations of Accounts Receivable, The Secured Lender, 2, vol.48, 28. The best way to determine whether accounts receivables are fairly stated is through a field examination. Risks involved in financing accounts receivable that increase the lender's exposure for loss include: 1. the client may bill and hold, 2. The client may pre-bill, 3. Returns, allowances, or other credits may dilute the value of receivables, 4. The client may produce fictitious receivables. The auditor must ensure that the receivables are valid and collectible. Although each client employs different accounting methods and controls, some general standards exist that can be adjusted as circumstances require.

Mamo, David, (1994), "Receivables financing as a source of working capital" Nursing Homes, 8, vol.43, 28. Banks and finance companies are the most obvious source of receivables financing. Their lending decision is generally driven by an analysis of a borrower's financial statements.

The receivables function as part of the total collateral that the company pledges in order to strengthen its corporate commitment to finally repay the loan. In support of this, the company usually must periodically produce a report (the borrowing base report) showing how much in receivables it carries on its balance sheet.

Byl, Calvin D, (1994), Reporting accounts receivable to management, Business Credit, 9, vol.96, 43. Managers need to have timely, accurate, and useful information to understand and respond to the impact that the usually sizeable investment in accounts receivable has on the cash flow and profitability of their operating units. To determine what criteria for reporting on accounts receivable portfolios are requested by management or used by credit departments in other companies in the industry, a survey of credit managers from 34 agricultural companies was conducted

Black, Tom, (1998), Using receivables purchasing to improve cash flow for small businesses, Commercial Lending Review, 4, vol.13, 70-74. Within the last decade, a growing number of bankers have begun supplementing their commercial product line with receivables purchasing programs, boasting both exceptional yields and stable, satisfied customers. Receivables purchasing has great potential for community banks. For bankers willing to dig every day into invoices, payment terms, and billing statements, receivables purchasing is a way to create profits. Because receivables are the fastest-moving noncash asset a business has, effective and consistent monitoring is the backbone of any credit facility based on accounts receivable.

ANALYSIS AND INTERPRETATION

1. TABLE SHOWING THE ACCOUNTS RECEIVABLE TURNOVER RATIO FROM THE YEAR 2013 TO 2017

YEAR	NET CREDIT SALES	AVERAGE ACCOUNTS RECEIVABLE	ACCOUNTS RECEIVABLE TURNOVER RATIO (times)
2017	97669277	2745996	35.56
2016	96786576	8167703	11.84
2015	74528458	3233738	23.04
2014	56574307	5165855	10.95
2013	37426243	3137448	11.92

Interpretation

The above table and charts showing a high value of accounts receivable turnover is favourable and lower figure may indicate inefficiency in collecting outstanding sales. Increase in accounts receivable turnover overtime generally indicates improvement in the process of cash collection on credit sales. 35.56% of turnovers are received.

2. TABLE SHOWING THE AVERAGE COLLECTION PERIOD FROM THE YEAR 2013 TO 2017

YEAR	NO. OF WORKING DAYS	A/R TURNOVER RATIO	AVERAGE COLLECTION PERIOD (days)
2017	365	35.56	10
2016	365	11.84	31
2015	365	23.04	16
2014	365	10.95	33
2013	365	11.92	31

Interpretation

Since it is profitable to convert sales into cash quickly, this means that a lower value of Days Sales Outstanding is favourable whereas a higher value is unfavourable. However it is more meaningful to create monthly or weekly trend of DSO. Any significant increase in the trend is unfavourable and indicates inefficiency in credit sales collection.

3. TABLE SHOWING THE RETURN ON INVESTMENT RATIO FROM THE YEAR 2013 TO 2017

YEAR	CAPITAL EMPLOYED	PROFIT BEFORE INTEREST AND TAX	ROI RATIO
2017	24401076	10473721	42.9%
2016	18682742	8615319	46.1%
2015	17882637	9923087	55.4%
2014	10255970	9203081	89.7%
2013	6555620	4449131	67.8%

Interpretation

The above table and chart are showing the return on investment in each and every year of ROI as increased or decreased in profit before interest and tax. In 42.9% of profit before tax in ROI ratio is decreased. 89.7% of ROI ratio is increased in 2014.

4. TABLE SHOWING THE RECEIVABLES TO CURRENT ASSET RATIO FROM THE YEAR 2013 TO 2017

YEAR	AVERAGE ACCOUNTS RECEIVABLE	CURRENT ASSET	RECEIVABLES TO CURRENT ASSET RATIO
2017	2745996	23775238	0.11
2016	8167703	17138267	0.47
2015	3233738	13596742	0.23
2014	5165855	6304722	0.81
2013	3137448	3754667	0.83

Interpretation

The above table showing the receivables of current ratio should increase or decreased in a period of five years. The receivables of current ratio was 2013 is 0.83 is increased and 0.11 is decreased in the year of 2017. The company as going in profitability of upcoming period.

SUGGESTIONS

From the study made on the receivables position of the Company it is observed that they are in very have to:

1. Strengthen their management of receivables.
2. State explicit and articulate credit policies.
3. An efficient collection program.
4. Better coordination between sales, and finance departments.
5. A higher value of inventory turnover indicates better performance efficiency in controlling inventory levels.

6. A very high value of accounts receivable turnover ratio may not be favorable, if achieved by extremely strict credit terms since such policies may repel potential buyers.

CONCLUSION

This project focuses on the receivables management which plays a crucial role in the working capital of the company. The analysis of the project reveals that there is high volatility in extending credit period to customers. The analysis further reveals that there is great scope in increasing the sales volume, in managing better collection. The suggestions offered clearly indicated the efforts to be undertaken in better receivables management and increasing the turnover. If these suggestions are taken note of by company, then define rely the company can very well manage the working capital position with better collection through increased sales.

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AN ANALYSIS ON FIBONACCI THEORY IN SELECTED NIFTY PSE COMPANIES

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****D.Sathyaprasad**

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Abstract

The study is about the Fibonacci Tool and its importance to analyse and predict the stocks by its behaviour. It shows the accuracy in predicting the price target of buying and selling of stock. Here, I have justified the three approaches (i.e. upward, downward and consolidation approaches) by using the Fibonacci Retracement, Fibonacci Arc and Fibonacci Fan methods to analyse the trend, price target in both buying and selling of stock in the market and it also proven arithmetically. The Secondary data were collected from the five companies of NIFTY PSE Sector to analyse about the support and resistance level. From this project, we can eliminate the risk on investment and also helps to predict and identify the support and resistance level of the stock from its movement in the market.

Key Words: *Fibonacci, Predicting, Support, Resistance Level, Stock...*

Introduction

An equity share, commonly referred to as ordinary share also represents the form of fractional or part ownership in which a shareholder, as a fractional owner, undertakes the maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights. The aim of this project is to analyse the growth trend of Nifty PSE in equity market. It is mainly listed in NSE Index on the bases of Free Float Market capitalisation value. Nifty PSE Index can be used for a variety of purposes such as benchmarking fund portfolios, launching of index funds, ETFs and structured products. Fibonacci retracement is a very popular tool used by many technical traders to help identify strategic places for transactions to be placed, target prices or stop losses.

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There is a special ratio that can be used to describe the proportions of everything from nature's smallest building blocks, such as atoms, to the most advanced patterns in the universe, such as unimaginably large celestial bodies.

Nature relies on this innate proportion to maintain balance, but the financial markets also seem to conform to this 'golden ratio.' Here we take a look at some technical analysis tools that have been developed to take advantage of it.

Mathematicians, scientists and naturalists have known this ratio for years. It's derived from something known as the Fibonacci sequence, named after its Italian founder, Leonardo Fibonacci (whose birth is assumed to be around 1175 AD and death around 1250 AD). In mathematics, the Fibonacci numbers are the numbers in the following integer sequence, called the Fibonacci sequence. The every number after the first two is the sum of the two preceding ones (1, 1, 2, 3, 5, 8, 13, etc.). But this sequence is not all that important; rather, it is the quotient of the adjacent terms that possesses an amazing proportion, roughly 1.618, or its inverse 0.618. This proportion is known by many names: the golden ratio, the golden mean, PHI and the divine proportion, among others. So, why is this number so important? Well, almost everything has dimensional properties that adhere to the ratio of 1.618, so it seems to have a fundamental function for the building blocks of nature.

Don't believe it? Take honeybees, for example. If you divide the female bees by the male bees in any given hive, you will get 1.618. Sunflowers, which have opposing spirals of seeds, have a 1.618 ratio between the diameters of each rotation. This same ratio can be seen in relationships between different components throughout nature. Still don't believe it? Need something that's easily measured? Try measuring from your shoulder to your fingertips, and then divide this number by the length from your elbow to your fingertips. Or try measuring from your head to your feet, and divide that by the length from your belly button to your feet. Are the results the same? Some Where in the area of 1.618? The golden ratio is seemingly unavoidable. But that doesn't mean that it works in finance ... does it? Actually, the markets have the very same mathematical base as these natural phenomena. Below we will examine some ways in which this ratio can be applied to finance, and we'll show you some charts to prove it! When used in technical analysis, the golden ratio is typically translated into three percentages: – 38.2%, 50% and 61.8%. However, more multiples can be used when needed, such as 161.8%, 261.8%, 423% and so on. There are four primary methods for applying the Fibonacci sequence to finance: retracements, arcs, fans and time zones.

The golden ratio is the limit of the ratios of successive terms of the Fibonacci sequence as originally shown by Kepler. Therefore, if a Fibonacci number is divided by its immediate predecessor in the sequence, the quotient approximates ϕ ; e.g., $987/610 \approx 1.6180327868852$. The golden ratio (symbol (ϕ) is the Greek letter "phi") is a special number approximately equal to 1.618. It appears many times in geometry, art, architecture and other areas. The key Fibonacci ratio of 61.8% - also referred to as "the golden ratio" or "the golden mean". It is found by dividing one number in the series by the number that follows it. For example: $8/13 = 0.6153$, and $55/89 = 0.6179$. The 38.2% ratio is found by dividing one number in the series by the number that is found two places to the right. For example: $55/144 = 0.3819$. The 23.6% ratio is found by dividing one number in the series by the number that is three places to the right. For example: $8/34 = 0.2352$.

Statement of Problem

To identify the potential areas of support and resistance level of stock to buy, sell and to hold in the market. The tool predicts the future projection of trend and its price range to identify the accurate level of the stock price. In Stock market, More risk provides more returns, so it mainly eliminates the risk through the levels of prediction and also it can easily identify the entry and exit level in the market. Through this, the investors can be able to take clear decisions in the trading and also can suggest the investors to buy and sell or to hold in the market.

Objective of the Study

- To Study the stock behaviour of Companies from Nifty PSE Sector.
- To know how the technical tools are used to predict the future behaviour of the stocks.
- To know how investors can take investment decision based on Market trends.
- To analyse the movement and performance of the stock using the historical data.

Review of Literature

Mohab Nabil (2013) Here's a new technique for determining price targets after a breakout from a previous price swing. Fibonacci analysis, which is employed by practitioners of various sciences such as astronomy, mathematics, and architecture, also has a role in projecting price targets of financial securities.

After working with Fibonacci ratios for several years, I developed a new technique for determining price targets after a breakout (up or down) from previous price swings, which I call projected Fibonacci targets (PFT).

Rajesh Kumar (2014) Predicting the return of a financial product is a very risky task. It involves subjectivity and experts knowledge. In the development of an expert system, domain knowledge is one of the important component. For a software to be artificial intelligent, some heuristics are required, which can help in decision making. It is admitted by the technical experts of financial sectors that in predicting the support or resistance backtracking is required when prediction of support or resistance fails. In this paper, an attempt has been made to restrict the back tracking of support and resistance to a maximum of two attempts. Proposed model can be further used in machine learning to remove the subjectivity.

Mohd Khoshnevisan (2015) The homological fuzzy analysis for stock trading has been somewhat universally accepted by financial engineers. In this paper, I have made an attempt to modify the Fibonacci recurrences and apply Fuzzy Logic to create topological clusters to classify the stock patterns. In that, I have reviewed some of the previous literature, which is derived from Fibonacci numbers in asset pricing. This fuzzy logic algorithm tends to offer a greater reliability and accuracy for predication stock patterns.

Constance brown (2017) The Fibonacci analysis gives traders a first step toward applying Fibonacci analysis in the market. The book covers key elements of this technical analysis tool. Traders will get up to speed quickly on its unique benefits. The major ratios between numbers in the Fibonacci sequence describe predictable market patterns. Fibonacci analysis analyzes these movements to identify future market prices”.

Krishnamoorthi M. and Venkatesh .P (2017), they evaluate financial liquidity and profitability position of Select Pharmaceutical Companies in India, and described the Financial liquidity is mutually with profitability are the core participants of enterprise activities which, in order to function efficiently and effectively, the company should give regular important. Finally the conclude that, the various financial variables such as liquidity and profitability which influence in companies performance during the period of study and there were a few ups and downs in the profitability, but it is no affected the operations of the company to a great extent.

Krishnamoorthi M. and Venkatesh .P (2017), they describe Profitability and liquidity are the vital issues in the industrial finance; the concept of financial liquidity is not especially straight, as it has special aspects even though normally it deals to the Liquidity

management. They made analyses to evaluation of profitability, liquidity and dividend progress in large cap and mid cap steel companies in India. Finally, it conclude that Debtors Turnover Ratio, Dividend Per Share and Interest Coverage Ratio. Net Profit Margin seems to contribute least in discriminating between large cap companies and mid cap companies.

Research Methodology

The research is based on secondary data analysis. The study is an analytical research, as it aims at examining the secondary data for analysing the past data and that have been done in the technical analysis of stocks and it can also be used in scientific researches as they are unbiased and systematic. The Research design is Quantitative research because the data related to measurement, frequency of occurrences and prediction of future movement. In quantitative research provide quite accurate and reliable measures. Here, the sampling technique used is stratified sampling in probability sample. The sample of the stocks for the purpose of collecting secondary data to analyse its movement in the stock market that has been selected on the basis of Market capitalisation, Dividend, Bonus and Earning per share value. The stocks are chosen from the Nifty Public Sector Enterprise.

Sample Size

The sample size is extracted from five Nifty PSE companies out of twenty companies listed in NSE and are selected on the following criteria :

- a. The Company Market Capitalisation should be Rs.25,000 Crores and above.
- b. The Company which issued a regular Dividend for past five years.
- c. The Company Earning Per Share (EPS) should be Rs.9 and above.
- d. The Company which earned continuously profit for past 5years.

The selected five Nifty PSE companies are:

- i. Coal India Limited
- ii. Gas Authority India Limited
- iii. Indian Oil Corporation
- iv. National Thermal Power Corporation Limited
- v. Power Grid Corporation of India Limited.

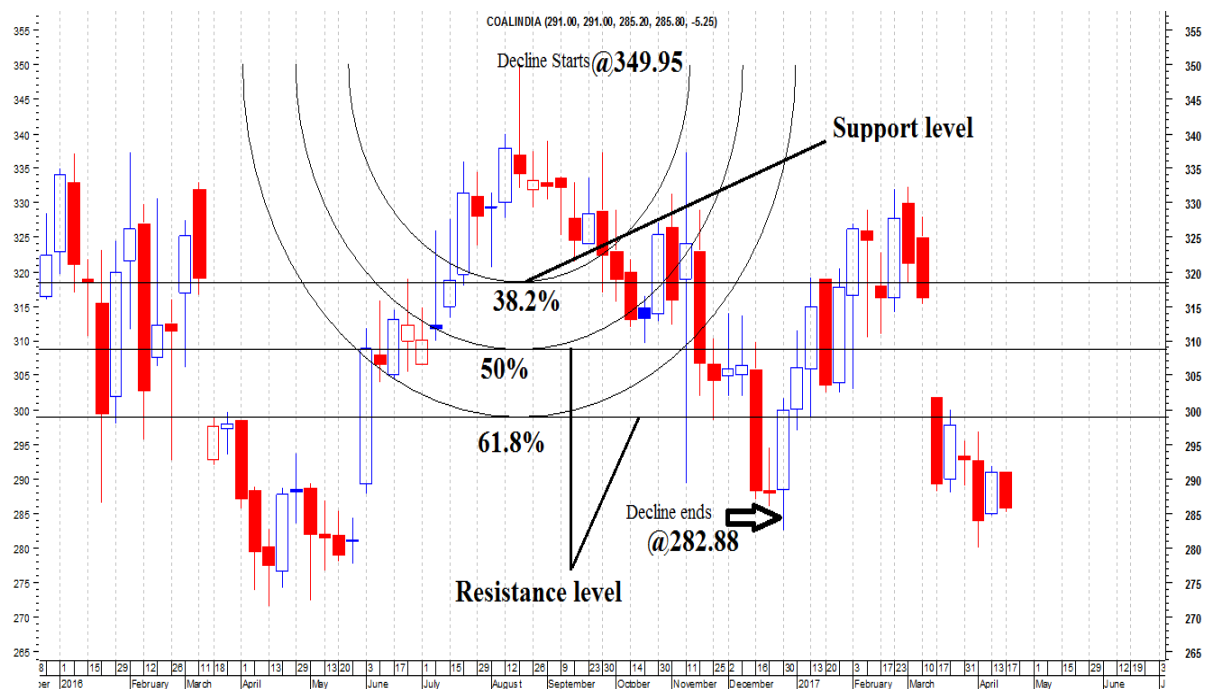
The stocks are examined for the period of one year on weekly basis i.e. from April 2016 to March 2017.

Statistical Tools used

- i. Fibonacci retracement
- ii. Fibonacci arc
- iii. Fibonacci fan

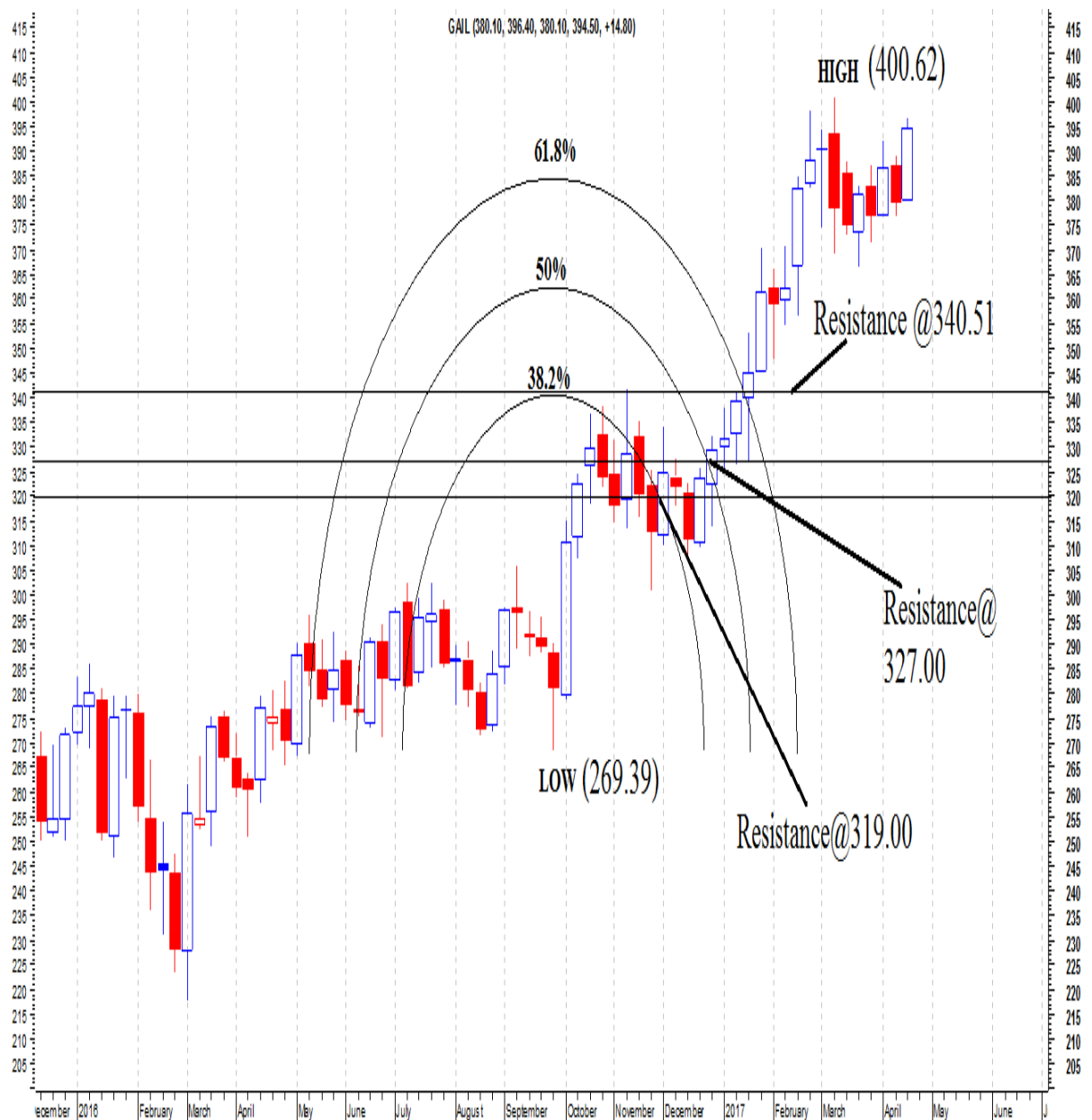
Data Analysis and Interpretation

COAL INDIA



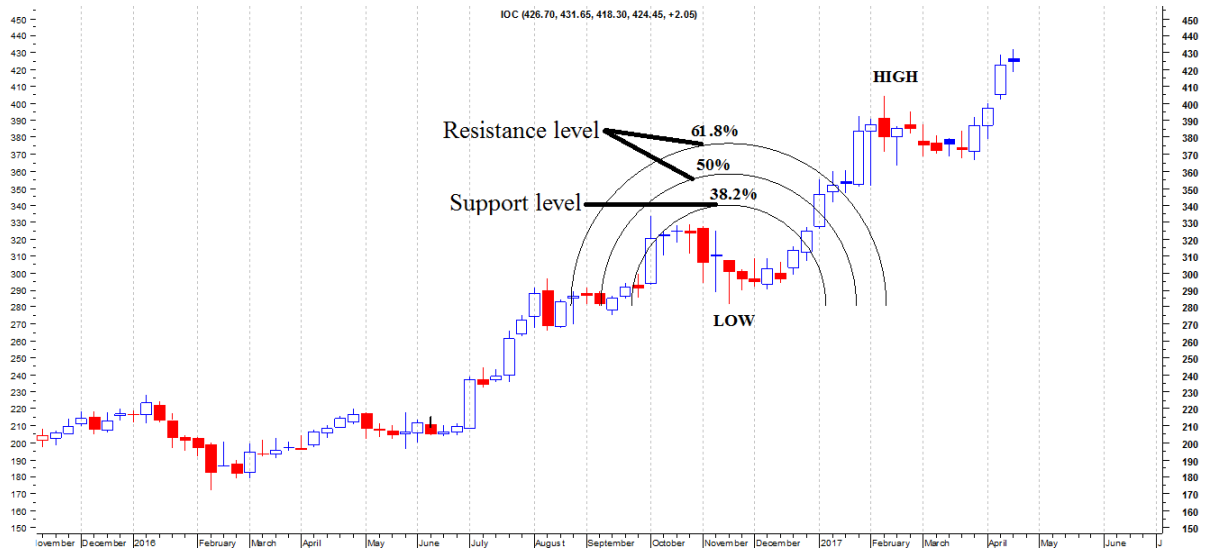
Inferences: The tool extended from August high (350) to December low (282.88) to identify the potential support and resistance. The Fibonacci Arcs show dynamic retracements that evolve over time and it can be drawn after a decline that it works slowly their way low and denotes the falling resistance zones. When the support level is at 38.2% then 50% and 61.8% act as a resistance. Here the target is to achieve 50% of resistance level but it crossed more than that and shows the reversal trend. So the tool is successful.

GAIL STOCK



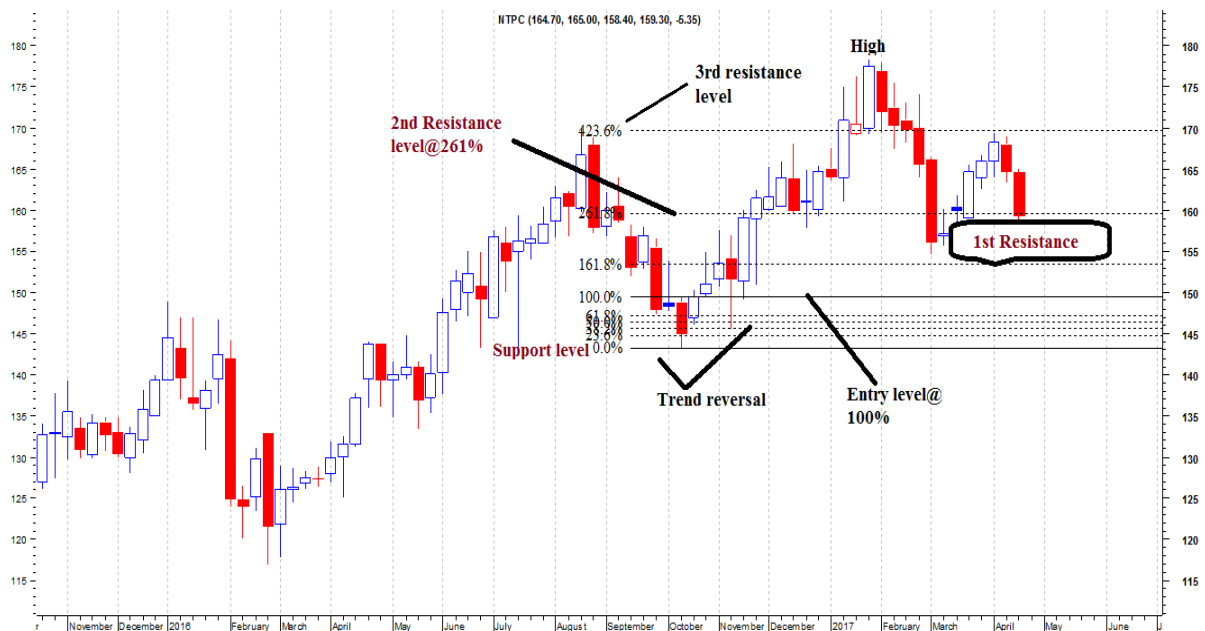
Inferences: The Fibonacci arc is drawn from September low (269.39) to March high (400.62) to identify the areas of resistance and support level. The stock crossed the first resistance at 319.00 of 38.2% level in a side way. Then it crossed the 50% resistance at 327.00 and also crossed the 61.8% level at 340.51 price level and still it trends to upward.

IOC STOCK



Inferences: The Fibonacci upward arc is drawn from November low to February high to identify the potential support and resistance level. The stock crossed the support level of 38.2% in side way and the resistance levels were 50% and 61.8%. By next week the resistance level also crossed by the stock and the trend still continues the uptrend by achieving the target.

NTPC STOCK



Inferences: The Fibonacci buying approach is drawn for the second week of October low and high to find out the potential support and resistance area. The stock entry level was at 100% by maintaining the support at 0% level and its target was kept at 161.8% of resistance level. Here, the stock reached the 161.8% of first resistance in the month of October and the

trend continues towards up. So the target may be changed to 261.8% by maintaining the support level at 100%. But it reached beyond the 423.6% of resistance level.

POWER GRID



Inferences: The Fibonacci uptrend fan is drawn from the period of February low to September high. The stock reached the first target level of 155.02 and crossed the 50% of resistance level. After the reach of 61.8% it achieved the second and third resistance level of 176 and 196.10 respectively. But still the trend continues towards up.

Conclusion

The Fibonacci Tools can be used effectively to identify the potential support and resistance level based on the volatility of the stocks in the market. It is used in all markets such as online stock trading, forex trading and also in the futures markets. The tool can also be analysed for any period wise i.e. minutes, hourly, daily, weekly, monthly and yearly. The Fibonacci tool is more advantageous than other tools in terms of future prediction of market prices, fixing the price target, analysing the trend in bullish and bearish trend. Thus the tool plays an important role technical analysis and stock market analysis.

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A STUDY ON CONSUMER ANALYSIS OF ORGANIC FOODS IN INDIA

***Snekha.M **Dr.R.Gayatri**

ABSTRACT

Organic foods are chemical free and now it is playing the major role all over the world. It focuses towards the healthy way of living. The study deals with consumer analysis of organic foods in India, this made an attempt to understand the consumer needs towards the organic foods and how far the foods easily available to the consumers. Organic foods have a huge health concept towards the consumers and respectively they are willing to pay more. This study results consumer in India are likely to prefer organic foods in the upcoming years and accordingly the awareness of organic foods and its health benefits to be spread. Therefore organic foods and there availability in several outlets and nearby stores brings out the major change in India.

KEYWORDS

Organic foods, India, Consumer satisfaction, Buying Behaviour

INTRODUCTION

Organic food plays a vital role in developed countries. Where in developing country is has less importance. Organic food usually price up to 20 to 30 percent more than normal food items which is one of the major challenges in Indian market as majority of the consumers are quite price sensitive. However, at the same time it is increasing health consciousness and increasing disposable income among Indians is constantly increasing the demand for organic food. Though the consumers prefer organic foods, its availability is likely to be less.

According to recently published Tech Sci Research report “**India Organic Food Market Forecast and Opportunities, 2020**” organic food in India is projected to register growth at a CAGR of over 25% during 2015-20, Growing health consciousness is the key factor surging the demand for organic food products in India. Other factors driving growth in the market which include higher income levels, improving living standard.

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The size of the organic food market, which is highly unorganised, was \$0.36 billion in 2014. In New- Delhi October 2015 the government discussed that the organic food and its market in India is growing 25-30% but its awareness about organic farming is low. And it revealed a study which concluded that the domestic organic food market would grow upto \$1.36 billion by 2020.

Indian climate has the capacity to grow several kinds of organic foods. Organic foods not only focuses on chemical free, health hazards but it also boost up farming. Consumers in India are likely to prefer organic foods at any cost and if this grows, it helps to increase the farmers income. Government initiatives aimed at improving the current scenario of organic farming in the country by providing financial and technical support to organic farmers.

According to “**India Organic Food Forecast & Opportunities, 2017**”, Indian organic food market is anticipated to grow at a significant CAGR of around 19% during 2012-2017 In India, majority of the demand for organic foods is originating from Tier I cities (such as Mumbai, Delhi, Chennai, Bangalore, Gurgaon and Pune). The major players in Indian organic food market are Conscious Foods, Sresta, Eco Farms, Organic India, Navdanya and Morarka Organic Foods. The consumers preference towards organic food is growing but the availability is less when compared. The government need to focus on retailers and outlets to improve with its availability in all regions so as to result in growth of organic foods and its range upto 50 to 60 percent by 2020.

LITERATURE REVIEW

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- Varghese MANALLOOR1*, Divyanshu SRIVASTAVA2, Shahidul ISLAM- 2016- At the production level, farmers face problems regarding certification of their products, due to very high certification costs. While these are very helpful measures, they are not widespread in organic food. More farmers need to be included under these schemes and organized into farmer groups which will help them get greater access to markets where their products are demanded. Further, if organized into bigger groups, agricultural inputs might be available to them at a cheaper costs due to bulk purchasing. This will reduce the production costs and increase the profit margin.

- Sathyendra Kumar AD*1 , Dr. H. M. Chandrashekar - Nov. 2015- Consumer behaviour is playing the major role while buying not only organic product any product. So the organic shops and product supply is limited but demand for it is more so farmer and all so government are think to improve or increasing production of organic product as well as good packaging, quality and market system it helps to improve the standard of living farmer and all it healthy to environment and all so it helps to government.
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- J.PADMATHY 1 R.SARASWATHY, FEBRUARY 2016- As consumers are aware and concerned about the green products, it creates an opportunity for developing green marketing focusing on more consumers. Overall, this study clearly identified a positive relationship between the variables or factors which affect consumers' buying behavior for green products. Consumers' buying behavior acts as a predictor and have a direct influence on the decision process when purchasing of organic food products. The results provide reasonable support to all the hypothesized relationships.
- Mohamed BilalBasha, CordeliaMason, Mohd FaridShamsudin, Hafezali IqbalHussain, Milad AbdelnabiSalem , 2015- Consumer behaviour involves the psychological processes that consumers go through in recognizing needs, finding ways to solve these needs; collect and interpret information; make plans and

implement these plans, making purchase decisions and post-purchase behaviour. Consumer behaviour is the key to the impact that society has on the environment. Nowadays consumer behaviour is changing towards purchase of many environmental-friendly and organic products, due to awareness of environmental degradation and the related issues.

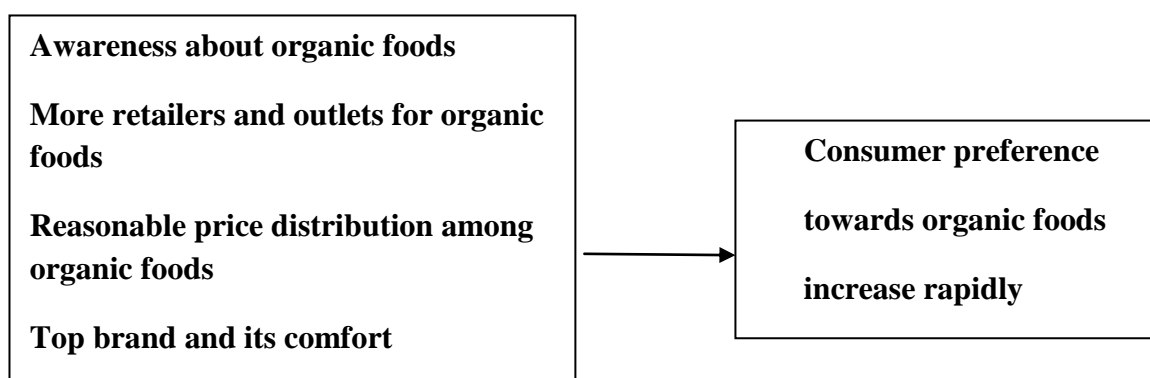
- Baisakhi Mukherjee 1, JANUARY 2017 - The study reveals the fact that there is awareness about the existence of organic products and the consumers are positive towards the approach. The government should also support the producers and motivate their production and marketing initiatives to capture the market for organic products. The study also reveals the fact that consumers will be more interested in purchasing organic products if they are provided with more information, product choices, timely availability and affordable price.
- Salvador V. Garibay and Katke Jyoti, FEBRUARY 2003- In order to improve organic farming one should possess proper funding whereas here it has lack of awareness, funding, no proper infrastructure, no proper marketing, organic foods not easily available and with high price.

OBJECTIVES

- To study the consumer philosophy towards Organic foods
- To study the consumer view towards availability of organic foods
- To study the consumer satisfaction level towards the organic foods
- To study the buying behavior of organic food consumers
- To Know the customer purchasing level towards top organic brand

Conceptual framework of the study

From the above literature review it is clear that consumers prefer organic foods and it increases in the upcoming years. Consumers also tend for easy pick up and hence the availability of organic foods should be increased. Based upon the proposal the conceptual model for the research paper is mentioned below.



The information contained in this report is based upon secondary data sources. Secondary research included an exclusive search of relevant publications. According to the secondary data it was found that 50 percent of consumer buys organic foods once in a month and 30 to 40 percent consumers buy more than twice in a month. This shows that there is a great chance to improve the growth of organic foods by 2020.

The study involves local online websites, magazines, books based on Natural and Organic food. Organic foods were first practiced by our ancestors and later it started disappearing. Taste was the major reason for avoiding organic foods. In 2014 again the health conscious in India was found to be focused and accordingly the producers awaked. They started producing new organic foods and products but with high price. Consumers from high standards who practice organic foods found easy to buy but others were not. Consumers were less aware about the organic foods, on controversy if consumers were aware they found it difficult to find the availability.

It was also reported that 70 to 80 percent of women prefer organic foods. In order to stay healthy they prefer organic foods with taste. The producers can also focus towards the taste and flavor in the foods.

Data Analysis and interpretation

The analysis reveals that most of the women are likely to consume organic foods when compared to men. 60 to 70 percent of women between 25-40 years of age prefer organic foods. Among all the locations shopping complexes is the most popular location for the purchases scoring 50 % of the respondents and organic retail stores that are specialized in organic products scores 30% as the popular destination to purchase organic product.

This also indicates that consumers are more likely to purchase organic products of reputed brands which assure safety and are certified. Organic food marketers should encourage the government to propose legal standard on organic food certification in order to protect health

of the general public. Average income consumers are found to be interested towards organic foods. Based on the analysis the interpreted by the research as limited choices, high price and less availability.

Findings and recommendations

The study reveals that consumer is still unsure to prefer organic foods due to lack of awareness and health benefits. They also feel unsatisfied with the price and how far the products to be trusted. Most consumers felt that organic produce would cost at least somewhat more than conventional produce, where females and advancing education positively affected this outcome. And they wish to select foods from certified producers. Organic food marketers could educate the public about certified labels by means of advertisements or promotion such as TV advertisements

Similarly, it indicates that there is a shortage in its quantity. The limited stocks in the markets always attract limited consumers, more the availability more will be the consumers. Funding and financing plays a major role in organic foods. Government in turn should posses focused interest towards the health benefits and provide proper funding to improve the growth in upcoming years. Awareness and training program to farmer: Because more number of farmer is not grow without use of chemicals. Because farmer are go only production of high yield commercial crops so he will use more chemical fertilizer and pesticides. But some majority of farmer success in organic farming.

Suggestions

The study enlightens that there is positive approach from women and from average income consumers. Consumers are increasingly aware about food safety and hence safe and healthy aspects should be mentioned in packaging, branding and advertising to draw attitude towards brand or products. Government is all so support to grow of organic farming and all so farmer through good organic product market facilities, financial support and so on, Therefore government should support the producers and implement the marketing strategies thereby increasing the production and creating awareness. This boosts up the environment chemical free and rapidly attracts consumers. It also encourages farmers and improves a healthy life with low cost.

There is all very important is to develop more marketing area. Because there is no regulated market facility in organic product. During marketing, the marketers can insist on the importance by means of education and promotion, so that the consumers one day will

consider their responsibility towards health. Perhaps consumers are not even aware that the organic alternative exists, or they are not willing to look for organics outside of supermarkets or roadside stands. So it is suggested to improve awareness.

Conclusion

The objective of this study was to assess the consumer philosophy, purchasing level, satisfaction and buying behaviour and availability of organic foods in the market. A significant difference between gender and the organic food consumption is found. It was found that females with average income ranging from 25 to 40 years are more adapted to regular purchase of organic foods. It was concluded that marketer should consider in marketing products, product positioning and availability of organic foods.

The increase frequency of viewing the advertisement of organic food products and better taste would influence the purchase organic food products. With the effort of government to streamline regulatory mechanisms for improve of organic produce and awareness among local consumer for domestic consumption will pave way for faster development of organic farming and products by 2020.

GENDER AND WORK ENGAGEMENT: A STUDY OF ACADEMIC STAFF IN HIGHER EDUCATION

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Abstract

This paper examines the impact of gender differences on the work engagement level of the academicians working in higher education institutions. The study adopted survey by questionnaire method for data collection from the academic staff members of various Universities located in the Kashmir region. Respondents were randomly selected and a sample of 123 academic staff members was drawn. The impact was empirically examined regarding academic staff members from three universities using independent sample t-test. The results of the study depict that the work engagement level of female academicians is significantly better than that of the male academicians in the sample institutions. These results can be generalized to other universities and institutions of higher education. The study will assist the HR practitioners in designing the strategies for providing better working conditions in the universities. The study will also help in identifying the gender gap and in developing requisite strategies to bridge these gaps.

Keywords: Work Engagement, Gender, Academic staff, Higher Education.

Introduction

The Organisational performance of service organisations like higher education institutions depends primarily upon the performance of their individual employees. In higher education institutions, the performance of academic staff determines the quality of academic services offered by the institution and is the pivot around which all the educational activities, such as curriculum, evaluation, etc., rotate. Therefore, to have an energetic, dedicated and focussed academic staff becomes extremely crucial for a higher educational institution to be effective and productive. Work engagement leads to improved employee productivity because engaged employees are energized and passionate about the work they do and with passion comes excitement, enthusiasm and productivity (Kroth and Boverie, 2003).

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Higher education institutions therefore, need to strive to enhance work engagement of their academic staff because engagement leads to better employee performance and overall organisational productivity.

Owing to its importance, the concept of Work engagement is now being extensively researched. However, very few research studies have empirically examined the impact of individual characteristics such as gender of the employees on their level of Work engagement. Researchers tend to adopt a blanket approach to the evaluation of the Work engagement levels of male and female employees and thereby ignore the influence of gender differences on the said concept. The present study focuses on gender of employees as individual-level variable which is made salient in organizational settings and thus produces distinct experiences for different gender in the organizations. This study, therefore, is an attempt to fill the gap in this field and provide a new perspective to the findings of previous studies on the subject of Work engagement.

Literature Review

Schaufeli et al. (2002) define employee work engagement as a positive fulfilling, work related state of mind that is characterized by vigor, dedication and absorption. They further state that engagement is not a momentary and specific state, but is a more persistent and pervasive affective – cognitive state that is not focused on any particular object, event, individual, or behaviour. Harter, Schmidt and Hayes (2002) define employee work engagement as the individual's involvement and satisfaction with as well as enthusiasm for work. Hewitt (2004) defines employee work engagement as the employees desire to speak positively about the organization, desire to be a member of the organization and tendency to go beyond the expected for the organization. Wellins and Concelman (2005) suggest that Work engagement is the illusive force that motivates employees to higher levels of performance. This coveted energy is an amalgam of commitment, loyalty, productivity and ownership. They further added that it includes feelings and attitudes employees have towards their jobs and their organization. Robinson, Perryman and Hayday (2004), define engagement as a positive attitude held by the employee towards the organization and its values. An engaged employee is aware of the business context, works with colleagues to improve performance within the job for the benefit of the organization. They further add that organization must develop and nurture engagement which is a two way relationship between employer and employee.

Employee work engagement refers to the amount of discretionary effort exhibited by employee in their jobs (Frank, Finnegan & Taylor 2004). Macey and Schneider (2008) looked at engagement attitudinally and behaviourally. They distinguished three broad conceptualizations of employee work engagement, namely state, trait, and behavioural engagement. Sarkar (2011) opined that employee work engagement is a barometer that determines the association of a person with the organization. Common to all these definitions is the idea that employee work engagement is a desirable state, having an organizational purpose. It connotes involvement, commitment, passion, dedication and enthusiasm at work.

According to Rothbard (1999), there are a number of differences between men and women in terms of how engagement in one role is related to engagement in another role. Specifically, while men experience enrichment from work to family, women experience depletion from work to family. Conversely, while women experience enrichment from family to work, men do not experience linkages from family to work. Gender differences, therefore will influence the level of Work engagement among male and female employees. Gallup's US research found that women tend to find more fulfillment in their jobs and as a result of which are more engaged than men (Johnson, 2004). However, a contrasting finding was reported by a 2006 cross national study, conducted by Schaufeli, Bakker, and Salanova who surveyed 14,521 employees and found that engagement did not differed significantly between genders. Based on this discussion, we propose our study hypothesis:

Hypothesis: Gender influences the level of employee Work engagement.

Research Design & Methodology

The sample

The sample of the study consisted of the respondents from three universities of Kashmir province i.e. University of Kashmir, Central University of Kashmir and Islamic university of science and technology. The elements included professors, associate professors and assistant professors of the aforementioned universities. The selection of sample was governed by the principles of judgemental sampling. A total of 150 questionnaires were administered to the potential respondents chosen from 3 sample Universities (50 questionnaires in each University), out of which 123 usable responses were received, for a final response rate of 82 percent.

Data Collection Tool

Employee work engagement in this research is measured using the *Utrecht Work Engagement Scale (UWES)* developed by Schaufeli *et al.* (2002). This measure is a three-factor scale consisting of seventeen items aiming to measure the three constituting aspects of work engagement i.e. vigor, dedication and absorption. All seventeen items are scored on a six-point Likert scale ranging from 1 (never) to 6 (always).

Reliability

Cronbach's alpha (α) values were used to test the reliability of all the constructs so as to obtain a dependable picture of internal consistency of the measuring instrument. The results of reliability test, given in Table 1, reveal that for all the constructs, alpha (α) values are above the threshold level of 0.7, indicating a good internal consistency.

Table 1. Cronbach's Alpha values

<i>Construct</i>	<i>Alpha (α)</i>
<i>1. Vigor</i>	<i>0.74</i>
<i>2. Dedication</i>	<i>0.78</i>
<i>3. Absorption</i>	<i>0.83</i>
<i>4. Work Engagement</i>	<i>0.81</i>

Results & Discussions

The results obtained from the study are described in the following paragraphs:

Respondent Demographic Profile

Table 2 shows the distribution of respondents' gender. Out of the total 123 respondents, 63 were male (51.21%) and 60 were female (48.78%).

Table 2: Demographic profile of the respondents

<i>Gender</i>	<i>Frequency</i>	<i>Percent</i>
<i>Male</i>	<i>63</i>	<i>51.21</i>
<i>Female</i>	<i>60</i>	<i>48.78</i>

An attempt was made by the researcher to have an equal number of male and female respondents in the final sample.

Gender and Work Engagement

Descriptive and group wise mean scores are presented in Table 3. Mean scores of the female academic members of the sample universities for the three dimensions of Work engagement as well as for overall Work engagement is slightly higher than the reported mean scores of respondent male academic members. Therefore, female academic members/respondents have a higher level of Work engagement than their male counterparts.

Table 3: Descriptive Statistics of Work Engagement (N=123; Male 63: Female 60)

<i>Construct</i>	<i>Gender</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>VIGOR</i>	<i>MALE</i>	<i>4.25</i>	<i>.255</i>
	<i>FEMALE</i>	<i>4.31</i>	<i>.244</i>
<i>DEDICATION</i>	<i>MALE</i>	<i>4.10</i>	<i>.268</i>
	<i>FEMALE</i>	<i>4.14</i>	<i>.274</i>
<i>ABSORPTION</i>	<i>MALE</i>	<i>4.17</i>	<i>.280</i>
	<i>FEMALE</i>	<i>4.25</i>	<i>.269</i>
<i>WORK ENGAGEMENT</i>	<i>MALE</i>	<i>4.17</i>	<i>.281</i>
	<i>FEMALE</i>	<i>4.23</i>	<i>.289</i>

Further, Independent sample test was utilized to ascertain whether the difference in the mean scores of the respondent male and the female employees of the sample universities with respect to Work engagement is statistically significant or merely an outcome of a random variation. The results indicate that the perceptual differences of employees are statistically significant when the differences are evaluated on the basis of gender as the *p* value is less than .05 (Table 4), indicating that the female employees are more engaged in their work as compared to the male employees of the sample universities.

Table 4. Independent Samples Test (Gender).

Construct	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference
VIGOR	.550	.459	-1.132	121	.259	-.04242
DEDICATION	1.162	.282	-1.867	121	.063	-.07064
ABSORPTION	1.631	.203	-1.143	121	.254	-.04541
WORK ENGAGEMENT	.016	.901	-1.998	121	.047*	-.05282

* $p < .05$.

Conclusions and Implications

In view of the findings obtained in the present study, which has been detailed above, it is quite safe to conclude that the academic staff of the three sample universities under study has reported a fair level of engagement with respect to their work. Further, on basis of the results obtained in the present study through independent samples test, it is quite safe to conclude female academic members have reported higher engagement with their respective work as compared to the male faculty members and the differences in level of Work engagement between the two genders is statistically significant. Therefore hypothesis: - *Gender influences the level of employee Work engagement* can be safely accepted.

The implication of the research for the HR practitioners is that in order to develop and engage employees, a much more flexible approach is to be adopted. An approach that takes into account the gender differences that exist among the employees and is flexible enough to satisfy the needs and priorities of different groups of employees.

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AN OVERVIEW OF ETHICAL ASPECTS OF WOMEN IN ADVERTISEMENTS

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ABSTRACT

Advertising is a powerful tool used by the corporate to convince, manipulate and shape the behavior of the consumers. The images of women used in advertisements have been a used as a matter of discussion for considerable time as most of the advertisements use women as an instrument to attract to consumers. Women in advertisements are presented either in a sexually provocative manner or in a non-traditional role which has left a very bad impact on individuals as well as on the society and also they badly influence socio cultural values and families which led to various problems like depression, sexual crimes etc.

KEYWORDS: *portrayal, sexual objects, stereotype, women*

INTRODUCTION

Now- a- days, many companies use woman as an entity to attract customers' attention towards the products sold by them. Women are exploited as a marketing instrument in a wide range of companies' activities. Women appear as sexual objects in many advertisements irrespective of their need or connection in such products. It became quite common to use sexually attractive women in some advertisements though it never required to. Baker's study (2005) showed that an average person in US is exposed to 3000 ads per day. Even Indians too exposed to more or less same number of commercials every day due to wide use of Internet.

REVIEW OF LITERATURE

It has been argued that the usage of women as sexual objects in advertisements has enormous negative effects on individuals and societies. (Lanis and Covell, 1995; Brown, 2002; Zillmann, 2000; Stern and Handel, 2001; Wilson and Moore, 1979; Allen et al 1995)

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Many studies have shown that women are still being used a marketing instrument which degrades her value. Sexuality is also one of the reasons for gender inequality. Women abuse in marketing practices negatively affects social values and women's role in society. Although the actual position of many women in society has improved significantly the images of women in commercials have not changed appreciably. (Baker,2005). Brown (2002) argues about cultivation theory where the exposure to sexuality was found to increase the adolescents' acceptance of non-marital sexual behavior. He also argues that exposure to sexuality increases interpersonal violence. Another research conducted in 2001 also claimed that viewing sexual scenes may cause girls and boys to have sexual relations. Zilman (2000) said prolonged exposure to erotica may cause exaggerated as well as more unusual and unethical kinds of sexual behavior. It also will diminish the individual's concerns about sexual child abuse and increase sexual callousness. Pornographic photographs also lead then to commit sex crimes. It creates a mindset among the youngsters that institution of marriage is only sexually confining and having a family and raising kids are coming unattractive prospects. Exploiting women's body in ads not only degrades her feminine role but also the social etiquette. (Richmond & Hartman, 1982).

IMPORTANCE OF WOMEN IN ADVERTISING

The main reasons for focusing women in most of the advertisements are

- Majority of the advertisements are women and family oriented
- Women are good decision makers regarding purchase for their family
- Women decide the brands as they only use them for their chores

But with the passing of time, it changed. The roles of women in advertising have taken different versions in different decades. This article shows the different dimensions a woman has been portrayed during different time period.

THE ROLE OF WOMEN IN INDIAN ADVERTISEMENTS BEFORE 5 DECADES

The women were depicted as dependents or housewives and very rarely as working women in most of the advertisements. Most of the times their roles and they were projected like below.

- Their place is their House
- They don't take many important decisions at home
- They need to be protected by men as they are dependents
- Men consider women as sexual objects not as individuals

Some detergent and Tea commercials depicted women as being busy with their chores. Women's tasks are only washing, cleaning, cooking, taking care of their family members' lives etc. she is very caring, a good homemaker etc. Some studies have shown that advertisements portraying women as homemakers may activate the belief that that women are nurturing and domestically minded (Clifton, McGrath & Wick 1976; Nosewothy & Lott, 1984; six & Eckes, 1991)

And women in the advertisements represent what Society, especially the men's' society holds the ideal image of women. But role of women in advertisements took a transformation as a professional in the next decade.

THE ROLE OF WOMEN IN INDIAN ADVERTISEMENTS BEFORE 4 DECADES

This is the period where Feminism came into effect in US and it had a great impact in almost all countries including India. Indian women also realized their potential and a need to portray themselves in the society. They wanted to go to the outside and prove the world so as a working woman or some achiever. Advertisers too immediately realized their mentality and changed their advertisements by showing their skills and power. Some advertisers realized the society has really changed. They started showing women in their commercials as strong and independent woman who needed no one in her life. Women started to respond to the products and advertisements which provided better images about women ignore advertisements which exhibited them as housewives with no potentials. After seeing the success of Soap commercials which portrayed women as free and confident, many brands started projecting women in the same manner. In the next decade advertisers tried to build many possible positive images of women to sell their products.

THE ROLE OF WOMEN IN INDIAN ADVERTISEMENTS BEFORE 3 DECADES

In 90s the advertisers tried not to exhibit women stereotypically in order to increase their spending powers and take purchasing decisions. There was a decreasing trend in depicting women as dependents and men as authoritative or dominant over women. Instead women were depicted as career oriented, bold, modern and social. But still there are some advertisers who used women as sex objects irrespective of the nature or use of the products. Though it is obvious that never needed any sexual portrayal of woman to promote such products. Some pollsters and critics worried that repeated telecasting of such commercials will always contribute to a wide range of social problems like violence against women, chauvinist attitudes and beliefs, eating disorders, sexual harassment etc. (Beckwith, 1994; Kilbourne & Lazarus, 1987; Laizer-Smith, 1989).

Women in advertisements were portrayed as attractive objects and they were used to represent the products which they are not at all concerned with and it still is continuing and even getting worse.

THE ROLE OF WOMEN IN INDIAN ADVERTISEMENTS AFTER MILLENNIUM

The women are portrayed to be very sexually now –a- days to attract more viewers. In a study conducted by Linder in 2004, approximately 40% of advertisements have portrayed women as decorative objects. Many commercials exhibit that women with good complexion, flawless skin and thin and lean figure are only successful and confident. If any woman wants to reach heights she must possess the above physical features. Otherwise they cannot succeed and merely they just stay as useless creatures to the Society. There is too much of emphasis on some health drinks too. If women do not drink those products in their middle ages they become lifelong patients or their death becomes very closer. In advertisement itself they are showing some doctors by highlighting some researches and create fear in the minds of the viewers especially women. The role of women in both their workplaces and homes become essential and successful and also they must be icons of beauty.

The chart given below can roughly depicts the status women in commercials during different epoch.

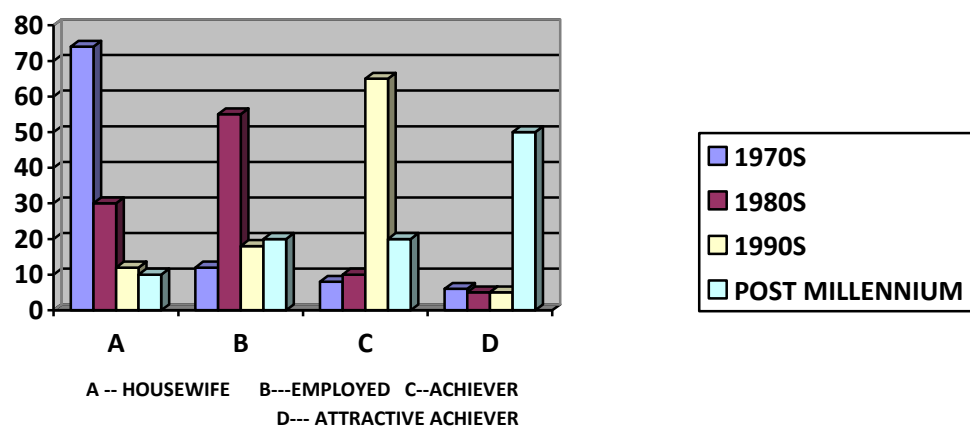


FIGURE 1: PORTRAYAL OF WOMEN IN COMMERCIALS

THE EFFECT OF PORTRAYING WOMEN IN COMMERCIALS IN THE SOCIETY

Almost 90 % of the Indian advertisements in the present day involve women. But it is miserable to note that they are used as only sexual objects in most of the ads. It shows the unhealthy circumstance of our society and our obsession with our diets and eating disorders.

And studies have indicated that portrayal of women as sex objects will lead to psychological effects such as depression hopelessness and eating disorders among youngsters as well as adults. And also it can give a negative self-image to women because of the belief that their intelligence and competence are not bring acknowledged.

As a whole, the portrayal of women in ads has created negative influence in the society.

It has created many ill effects. The attire used in moist of the commercials is of not Indian Culture. Many women wanted to become thin and they have a view that being thin is only healthy due to the illusions created by ads and it has created eating disorders amongst Indian women. In a study conducted in 2003, the researcher had found that respondents who had high levels of exposure to Fashion magazine had a liking towards ultra thin fashionable models than with the respondents who were not exposed to such magazines. Sexual appeals in ads consist of various elements. Sexuality may be of any one of the following forms - nudity, sexual imagery, seductive behavior, physical attractiveness, innuendo, camera effects etc.

The problems with the abuse of women in marketing practices arise at both the individual and societal levels.

Many studies have shown that women abuse in marketing practices negatively affects social values and women's role in society.

CONCLUSION

Advertisements are powerful media to sell products and aspirations. The repetition of ads so often may be uninteresting and it leaves an ineffaceable mark on the minds of the viewers. The images of women in Indian commercials have undergone a vast change. This change has offered both benefits and inconvenience to the society. In the current scenario, women are used in ads only if the product demands her presence. But certain advertisers use the women images as only sexual or decorative objects which leave a negative impact on the society. It has led to many problems like eating disorders, depression, behavioral modifications etc among people especially women. But we cannot put the blame fully on the media. We also must be aware and educate others to decide what must be taken from commercials and what not. But it is obligatory that we all must rise against the derogatory images used unnecessarily in commercials to have a better society tomorrow.

SUGGESTIONS

1. Commercials play a vital role in moulding the minds of kids and youngsters. So the advertisers should make it sure that it creates a positive images of women in ads.

2. It is a time to realize the changing role of women. So advertiser should focus women as not only as individuals but also intellectuals.
3. Advertisements can focus on the lower segment of the society too rather focusing on upper middle and upper segments.
4. Women should be used in commercials only if it really needs their presence.
5. Rules must be conscientiously followed by the advertisers as well as media.
6. The society also must be easeful while dealing with delicate issues like portrayal of women in ads and take necessary steps for healthy projection of women.

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**BRAND IMAGE FACTOR INFLUENCE IN PURCHASE DECISION OF
RESIDENTIAL HOUSES – AN EMPIRICAL ANALYSIS IN CHENNAI REAL
ESTATE MARKET**

***P. Senthilmurugan**

Abstract:

Purchase decision pertinent to high investments and one time buying in life times is a complex process and difficult to decide easily particularly in the case of buying new homes. Buyers do analyze cluster of buying criteria before preferring to buy a residential property. These comprehensive purchase decision making criteria usually encompass location, neighborhood, basic infrastructures, amenities, accessibilities, schools, hospitals and many more. In spite of considering these factors residential buyers also concede importance to brand images of the Real Estate Company or builders in their buying decisions. This study ascertains importance of brand image factors along with other purchase decision criteria of buyer in Chennai real estate market. This research article analysis the correlation of demographic attributes of buyers with their purchase decision criteria. The descriptive research design is adapted and data was collected from the respondent in structured questionnaire patterns. This study found significance of brand image factors in decision making criteria for buying residential homes in Chennai real estate market.

Key words: *Brand image, Buying criteria, Purchase decision, Residential houses, Real Estate*

Introduction:

The buying decision process or purchase decision process is defined as a series of interrelated activities that lead to a choice between alternatives. Generally, the decision-making process consists of five stages: problem recognition, searching for information, evaluation of alternatives, purchase decision, and post-purchase behavior. The consumer process begins when the buyer recognizes a problem or need in response to internal or external stimuli. After consumers recognize a problem, they collect relevant information from their long-term memories to determine whether a satisfactory solution is known.

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If the appropriate solution cannot be achieved from the internal search, consumers have to access the external search process.

Subsequent to information search process, the consumers will have the following three goals in evaluating and selecting alternative processes. Firstly, consumers intend to satisfy their real wants and needs; secondly, consumers are looking for certain benefits from the product or service to solve a consumption problem; and lastly, consumers view each product and its service as a bundle of attributes with varying abilities for delivering the benefits sought to satisfy their real wants and needs. The consumer determines which criteria they will employ to evaluate a product or service, and they then compare each alternative using each criterion. Finally, depending on the consumer's individual decision-making rules, they select the product or service which can best meet their desires and needs. In the evaluation stage, consumers form preferences from among the products in the choice set. They may also form an intention to buy the most preferred product. Individuals may adapt different criteria to evaluate which product can best meet their need based on the type of purchase and how consumers anticipate each will perform according to the various criteria.

Purchase decision in Residential houses

Purchasing a residential house is not an easy decision to make because it involves high investment and difficult to replaced. Therefore, buyers consider various factors and ensure that the residential houses got major attributes which they anticipated. This research explores buyer decision making process sequentially when they intend to buy residential houses. This research studies at what kind of circumstances potential buyers recognize their need for buying own houses, the sources from where information is searched for purchase decisions, and major factors considered for evaluate their needs and expectations when making purchase decision on residential houses particularly importance of brand images of real estate company or builders when they attempt to buy residential homes in Chennai real estate market

Objectives of the study

- To compare the differences between gender of the buyer and Brand & Reputation of the builders in purchase decision.
- To compare the differences between occupation of the buyers and Brand & Reputation of the builders in purchase decision.
- To compare the differences between most influential person in the family and reason for buying residential houses.

Literature background

The following literature supports brand image and other important criteria in residential property purchase decisions. *Janne porkka & Markku Riihimaki (January 2018)* say that real estate brand concept can be brought only by residential property location, services & performances and not mere name and logo. *Meera Singh (2014)* mentions in her article that brand audit helps in evaluating the position of a given company's brand from internal and external perspectives. It helps to identify and bridge the gap between company's want on brand and customers perception of brand in the market.. Dr. Ibrahim Mohammed Khrais, Zarqu University, Jordon.(*March 2016*) has found in his study that Structural, economical, geographical, environmental and economic factors do impact the purchasing decision of housing apartment in Irbid city. There are buyers who have previous experiences in purchases are evaluating the housing properties effectively

1. Another article is an evidence for residential properties also bough for investment decisions. *Lv Fang & Sch Gao (Aug 2011)* Real estate investment is a great factor that affects investment decisions, and decides real estate investment returns. Their article analyses the major influence factors of real estate investment, and builds an evaluation index system of real estate investment based on Analytic Hierarchy

2. Dr. Yu Jianying, Zhjiang University, China. (*Mar 2011*) has analyzed that real estate investment decision making is not only needed to consider profits but also to predict the risk accurately. The risks in a real estate development project were firstly analyzed. Then based on the traditional cash flow analysis, a practical method for the real estate project financial risk analysis was developed

3. The next literature is emphases on design of the residential house for decision making. The most important task that faces real estate developers and owners during investment decision-making is how to select a design option that would optimize the value of IRCs within a limited budget taking into account its overall cost. *Zhiye Huang (Aug 2010)*

4. *Wang, Ying and Xi'an (Sep 2009)* mentioned in their paper Hedonic theory to deduce that the degree of residential segregation depends on the degree of consumer preference for location, and consumer preference for different location attribute will result in the different urban space structure. The results show that consumers have the greatest preference for the location of houses in comparison with neighborhood conditions along with the structural conditions, which results in the clearer residential segregation

5. Ismail, Hafiszah (2012) state that the property market was perceived “as an interaction between three main functional components of market activities” (Keogh, 1994). Those market activities are the User Market, the Investment Market and the Development Market. They tries to link property development, demographic changes and Malaysian housing demand (preferences) in one specific context for example the Malaysian population by rate and age group, birth rate, life expectancy rate and age at first marriage

6. Gu Jie, Liu Hui.(2006) discovers in their research that housing consumption choice behavior, the result of binary logit model shows: first, a increase in family income and residential stability can make the probability of own go up. The probability of own can also rise when family is in the late of lifecycle or the rental market is more mature. The result shows, family income and residential stability are also the important factors to housing investment choice.

Research Methodology:

The design adopted by the researcher for this study is Descriptive Research Design. The research design was to be followed for this study is descriptive in nature where the aim would be to make an in-depth analysis the Buyers’ purchase decision of residential houses in Chennai real estate market. People who have bought or planning to buy residential houses in Chennai form population for the study. Therefore population is infinite. Convenience sample procedure is used by the researcher in selecting respondents from the population. There are 750 samples collected in convenience sampling method from various respondents who had bought and planning to buy houses in Chennai out of infinite population.

Hypothesis of the study:

1. There is no significant differences between gender of the buyer and Brand & Reputation of the builders in purchase decision
2. There is no significant differences between occupation of the buyers and Brand & Reputation of the builders in purchase decision
3. There is no significant differences between most influential person in the family and reason for buying residential houses

Analysis of the study:

Independent Sample Test (T. Test) is done to identify the differences between buyers’ demographical characteristics and Brand image & Reputation of builders in purchasing decision.

Table – 1 Comparison of Gender and Brand image & Reputation of builders in purchasing decision

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error
Brand Image and Reputation	MALE	26	27.5769	4.04152	.79261
	FEMALE	24	27.7917	3.83325	.78246

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Brand Image and Reputation	Equal variances assumed	.487	.489	-.192	48	.848	-.21474	1.11617	-2.45895	2.02947
	Equal variances not assumed			-.193	47.960	.848	-.21474	1.11376	-2.45416	2.02468

The above table shows mean score ranges from 27.57 to 27.79 and T test factor 0.487. The t test equality mean significance is (0.848) more than the accepted level significance (0.05).

Therefore null hypothesis is accepted and there is no significant relationship between male and female groups in deciding Brand image and Reputation of builders in purchase decision

ANOVA is done to identify the differences between Occupation of the buyers and Brand image & Reputation of builders in purchasing decision.

Table – 2 Comparison of Occupation of the buyers and Brand image & Reputation of builders in purchasing decision

ANOVA

Occupation

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	38.333	9	4.259	12.026	.000
Within Groups	14.167	40	.354		
Total	52.500	49			

Since F is significant the null hypothesis of no significant difference between Occupation and Brand Image & Reputation of builders for Purchase decision rejected. This study shows F value 12.026 which is significant Thus; significant difference between significant difference between Occupation and Brand Image & Reputation of builders for Purchase decision.

Table – 3 Comparison of Most Influential person in decision making and Reason for buying own Residential houses

ANOVA

influential person in decision

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.013	14	.572	2.453	.016
Within Groups	8.167	35	.233		
Total	16.180	49			

Since F is significant the null hypothesis of no significant difference between most influential person in family and Reason for buying residential is rejected. This study shows F value 2.453 which is significant. Thus, there is significant difference between most influential person in family and Reason for buying residential houses.

Findings and conclusion

This research attempted to find out the differences in brand image of the real estate company in purchasing decision of residential homes on the basis of certain demographic attributes. This study has identified that gender of the buyers does not make any significant differences in brand image factors; hence, both groups of buyers view brand image factor as an essential criterion for buying decision. Conversely, occupation of the buyers group revealed differences in their level of brand consciousness. Purchasing decision criteria also vary based on the influential person in the family. Thus, this research is concluded with the key note that brand image of the real estate builders is seriously considered by certain groups of buyers as one of the important criteria in their purchase decision making criteria in the residential home buying in Chennai real estate market.

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A STUDY ON CUSTOMER SATISFACTION WITH REFERENCE TO PAYTM SERVICE

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INTRODUCTION

Customer satisfaction is often defined in the marketing literature as a customer's overall evaluation of his or her purchase and consumption experience of a good or service. In addition, perceived service quality refers to consumer's judgment about the performance of product or service. Customer satisfaction is critically important because it reflects subjective customer evaluations of the attribute performance associated with the consumption experience. The customer satisfaction can be defined as a customer's perception of the degree to which customer requirements have been fulfilled. This degree is one of the key performance indicators of organization and their quality system. The customer compares the experienced quality to the expected quality and based on that makes decisions if he is satisfied or not. A company can affect the expected quality through various methods, for example by marketing communication and promotion, a built image and relationship management and marketing. Positive and negative word of mouth and the customer's needs and wants will also affect the expected quality of a service that a customer has. After the customer has taken part in the service process he will evaluate if his expected quality measures were met. Satisfaction is derived from the Latin satis(enough) and facere(to do or make). Thus, satisfying products and services have the capacity to provide what is being sought to the point of being "enough." Two related words are satiation, which loosely means enough up to the point of excess, and satiety, which can mean a surfeit or too much of enough, as if to say that too much is necessarily undesirable.

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These terms illustrate the point that satisfaction implies a filling or fulfillment. More recent interpretations in the consumer domain, however, allow for a greater range of favorable (and unfavorable) responses than mere fulfillment.

Fulfillment implies that a satiation level is known, as in the basic needs of food and water. However, observers of human behavior understand that each of these need levels can be and frequently is exceeded in various ways. Clearly defining and understanding customer satisfaction can help any company identify opportunities for product and service innovation and also serve as a basis for performance appraisal and reward systems. It can also serve as the basis for a customer satisfaction surveying program that can ensure that quality improvement efforts are properly focused on issues that are most important to the customer. Customer satisfaction has become the key operational goal for many organizations. They have invested heavily in improving performance in areas that make a strong contribution to a customer satisfaction. Companies are investing in 'database marketing', 'Customer relationship management', and customer planning in order to get closer to their customers and satisfying them in order to finally achieve "Customer Satisfaction".

STATEMENT OF PROBLEM

Though the Paytm is easiest way of transferring the money from one account to another account in the course of purchasing the goods and services, there is some insecurity felt by the public. In the junction, it is necessary to study that, at what extent people should have faith on Paytm and to analysis all the barriers, privacy issue and insecurity felt by the public.

NEED FOR THE STUDY

In the modern times the business organizations are adopting new ideas, techniques and methods for the growth of the business. The organizations are giving better services to their customers to face challenge posed by the competitors for every business, it is not only important to retain the present customers but also attract the new customers. So there is need to ascertain the customer satisfaction regarding the services providing by the Paytm. The need for customer satisfaction is necessary for all business, large or small. The satisfaction of the customer is an all important task. The present study aims to find out the factors that influence the customer satisfaction in mobile payment with specific reference to the Paytm service.

OBJECTIVES OF THE STUDY

- To understand the concepts of customer satisfaction, Paytm services
- To identify the inter relationship between the concepts
- To identify the factors that influence the customers satisfaction in the unit under study
- To analyze the order of preference of various service quality attributes
- To give suggestions for further improvement of the satisfaction level of respondents.

LITERATURE REVIEW

Layla and Bojei in their research paper on Customer's Perceived Value to Use Mobile Banking Services stated that, perceived value is a subjective concept that differs among bank customers. Although a number of factors have been suggested as important to understand mobile banking usage, very little attention has been given in literature to exactly what constitutes the value of mobile banking system. The aim of this paper is to examine factors affecting the value held by bank customers toward the use of mobile banking services. This study may enable banks to develop a marketing strategic plan based on perceived value from the customer's point of view. This study is based on primary data source.

Kiran has focused on the current trends and expected future of mobile banking. On the other hand online banking services provide cost saving opportunities for banks and value added for customers this is stated by LaukkanenTommi,(2007).Hsiu-Fen focused on rapid advances in mobile technologies and devices have made mobile banking increasingly important in mobile commerce and financial services. Using innovation diffusion theory and knowledge-based trust literature, this study develops a research model to examine the effect of innovation attributes(perceived relative advantage, ease of use and compatibility)

and knowledge-based trust (perceived competence, benevolence and integrity) on attitude and behavioral intention about adopting (or continuing to use) mobile banking across potential and repeat customers.

Based on a survey of 368 participants (177 for potential customers and 191 for repeat customers), this study uses a structural equation modeling approach to investigate the research model. The results indicate that perceived relative advantage, ease of use, compatibility, competence and integrity significantly influence attitude, which in turn lead to behavioral intention to adopt (or continue-to-use) mobile banking. Additionally, by using multi-group analysis with t-statistics, the results found that the antecedents of attitude toward mobile banking differ between potential and repeat customers. The implications for research and practice and future research directions are discussed. Bamoriya, and Singh, shows that Mobile banking is growing yet there are numbers of issues and threats in mobile banking system and the major problem of mobile banking is its non-adoption by the customers.

This research focuses on the barriers in adoption of mobile banking, on preferred services by the mobile banking customers and influence of demographic variable on mobile banking service adoption. A cross section descriptive design was adopted and data collected was subject to Product moment correlation, one-way Kolmogorov-Smirnov test and Frequency analysis was employed. Finding shows that, customers' security concern is the major barrier in adopting mobile banking services. As far as preferred services are concern balance check tops, as customers prefer information based services rather than financial services provided by the bank. Khan and Khan studied the market status differences between mobile and internet banking. The worldwide improvement of information technology has affected the banking industry. In the banking segment the impact of information technology is the preface of internet banking and mobile banking. The internet has created an incredible market space, another technology is the mobile phone has emerged to take more important role in business and society. User's attitude and behavioral characteristics for internet and mobile bank were examined in this study. A structured questionnaire was designed to collect responses. Bankers and common mobile business executives included which use their cell phone for financial transactions and check their balances on cell phones. It was observed that there is no difference in perceive usefulness of mobile banking and internet banking. Ketkar, Shankar and Banwat identifies the barriers/hurdles as well as enables/drivers of mobile banking and payments in India and uses the framework of interpretive structural modeling (ISM) for better understanding

of their interactions, driving power and depend rives. These positive and negative influences are than mapped on a common driver deepener's grid, to gain a better insight for implementation. The study observed 11 barriers and 11 drives of mobile banking in India. Rao &Prathima (2003) finds that there is huge potential of Mobile banking in India but Indian banks offering-banking services still have a long way to go Sathye (1999) study focused on the capital cities of Australia where use of internet and population was likely to be high and suggested that security concerns and lack of awareness about Internet banking and its benefits stand out as being the obstacles to the adoption of Internet banking in Australia. Author suggested some of the ways to address these impediments. Further, he suggested that delivery of financial services over the Internet should be a part of overall customer service and distribution strategy. These measures could help in rapid migration of customers to Internet banking, resulting in considerable savings in operating costs for banks. Rotchanakitumnuai&Speece (2003); Akinci, Aksoy&Atilgan (2004) stated that researchers investigated why corporate customers do not accept electronic form of banking, which can assist banks to implement this self-service technology more efficiently. Further they suggested that security of the e-channel is a major factor inhibiting wider adoption. Those already using electronic form of banking see m to have more confidence that the system is reliable, where as non-users are much more service conscious, and do not trust financial transactions made via e-channels. Non electronic form of banking users tend to have more negative management attitudes toward adoption and are more likely to claim lack of resources. Legal support is also a major barrier to electronic form of banking adoption for corporate customers. Kolodinsky, Hogarth &Hilgert (2004) stated that millions of Americans are currently using a variety of e-banking technologies including Mobile banking. However, millions of others have not or will not. They explored factors that affect the adoption or intention to adopt three e banking technologies and changes in these factors over time and suggested that relative advantage, complexity/simplicity, compatibility, observability, risk tolerance, and product involvement are associated with adoption. Income, assets, education, gender and marital status, and age also affect adoption. Adoption changed over time, but the impacts of other factors on adoption have not changed. Gan, Clemes, Limsogunchai&Weng (2006) findings stated that in New Zealand the output from the logistic regression indicates that the service quality, perceived risk factors, user input factors, employment, and education were the dominant variables that influence consumers' choice of electronic banking and non-electronic banking channels. Comninou et al. (2008) suggested that consumers will only transact electronically (online/mobile banking) if there is convenience and security.

Further Sharma and Singh (2009) found that Indian mobile banking users are specially concern with security issues like financial frauds, account misuse and user friendliness issue - difficulty in remembering the different codes for different types of transaction, application software installation & updating due to lack of standardization

RESEARCH METHODOLOGY

A research design is purely and simply the plan for the study that guides the collections and analysis of data. Primary data consists of original information collected for a specific purpose. In this study the primary data has been used. This project is relied upon the user of the Paytm service from the general public. To obtain the primary data a well-structured both open-ended and close-ended questionnaire was prepared to get the response. The respondents were met face to face to get their response. Secondary data can be defined as the information already existing somewhere, have been collected for some other purpose. In this study the secondary data has been used. Sample size indicates the number of people to be surveyed through large sample. Due to constrain of time and money the sample size was restricted to 74 respondents. The respondents are selected by the general public.

ANALYSIS

TABLE – 1: ANOVA WITH AGE WISE RESPONDENTS

PARTICULARS		Sum of Squares	Df	Mean Square	F	Sig.
Performance	Between Groups	1.155	4	0.289	0.996	0.416
	Within Groups	20	69	0.29		
	Total	21.155	73			
	Between Groups	3.403	4	0.851	3.352	0.014

Efficiency of service						
	Within Groups	17.513	69	0.254		
	Total	20.916	73			
Reason	Between Groups	4.418	4	1.105	2.762	0.034
	Within Groups	27.595	69	0.4		
	Total	32.014	73			
Barriers	Between Groups	2.663	4	0.666	1.135	0.348
	Within Groups	40.491	69	0.587		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factors efficiency of service and reasons for using Paytm are significantly influenced by the demographic factor Age since the values are less than 0.05. This indicates that the different age group have different opinion.

TABLE – 2

ANOVA WITH GENDER WISE RESPONDENTS

PARTICULARS		Sum of Squares	Df	Mean Square	F	Sig.
Performance	Between Groups	0.255	1	0.255	0.878	0.352
	Within Groups	20.9	72	0.29		
	Total	21.155	73			
Efficiency of service	Between Groups	0.006	1	0.006	0.021	0.886
	Within Groups	20.91	72	0.29		
	Total	20.916	73			
Reason	Between Groups	0.711	1	0.711	1.636	0.205
	Within Groups	31.302	72	0.435		
	Total	32.014	73			
Barriers	Between Groups	0.21	1	0.21	0.351	0.555
	Within Groups	42.945	72	0.596		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factors of Paytm are insignificantly influenced by the demographic factor gender since the values are more than 0.05. This indicates that the opinion of each gender is different.

TABLE – 3

ANOVA WITH MARITAL STATUS WISE RESPONDENTS

PARTICULARS		Sum of Squares	Df	Mean Square	F	Sig.
Performance	Between Groups	0.255	1	0.255	0.878	0.352
	Within Groups	20.9	72	0.29		
	Total	21.155	73			
Efficiency of service	Between Groups	0.006	1	0.006	0.021	0.886
	Within Groups	20.91	72	0.29		
	Total	20.916	73			
Reason	Between Groups	0.711	1	0.711	1.636	0.205

	Within Groups	31.302	72	0.435		
	Total	32.014	73			
Barriers	Between Groups	0.21	1	0.21	0.351	0.555
	Within Groups	42.945	72	0.596		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factors of Paytm are insignificantly influenced by the demographic factor marital status. Since the values are more than 0.05. This indicates that the different marital status have different opinion.

TABLE – 4

ANOVA WITH QUALIFICATION WISE RESPONDENTS

PARTICULARS		Sum of Squares	Df	Mean Square	F	Sig.
Performance	Between Groups	0.129	4	0.032	0.106	0.98
	Within Groups	21.025	69	0.305		
	Total	21.155	73			

Efficiency of service	Between Groups	1.522	4	0.38	1.354	0.259
	Within Groups	19.394	69	0.281		
	Total	20.916	73			
Reason	Between Groups	3.421	4	0.855	2.064	0.095
	Within Groups	28.592	69	0.414		
	Total	32.014	73			
Barriers	Between Groups	2.958	4	0.74	1.269	0.29
	Within Groups	40.196	69	0.583		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factor reasons for using Paytm are significantly influenced by the demographic factor marital status. Since the values are less than 0.05. This indicates that the status is different.

TABLE – 5: ANOVA WITH OCCUPATION WISE RESPONDENTS

PARTICULARS	Sum of	Df	Mean	F	Sig.
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		Squares		Square		
Performance	Between				2.74	0.03
	Groups	2.905	4	0.726	6	5
	Within Groups	18.25	69	0.264		
	Total	21.155	73			
Efficiency of service	Between				1.41	0.23
	Groups	1.59	4	0.397	9	7
	Within Groups	19.326	69	0.28		
	Total	20.916	73			
Reason	Between				1.66	0.16
	Groups	2.823	4	0.706	8	7
	Within Groups	29.191	69	0.423		

	Total	32.014	73			
Barriers	Between				0.49	0.74
		1.195	4	0.299		
	Groups				1	2
	Within Groups	41.959	69	0.608		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factor of performance in Paytm are significantly influenced by the demographic factor occupation since the values are less than 0.05. This indicates that the occupation of each group is different.

TABLE – 6: ANOVA WITH MONTHLY INCOME WISE RESPONDENTS

PARTICULARS		Sum of Squares	Df	Mean Square	F	Sig.
Performance	Between Groups	0.317	4	0.079	0.263	0.901
	Within Groups	20.837	69	0.302		
	Total	21.155	73			

Efficiency of service	Between Groups	0.312	4	0.078	0.261	0.902
	Within Groups	20.603	69	0.299		
	Total	20.916	73			
Reasons	Between Groups	1.284	4	0.321	0.721	0.581
	Within Groups	30.73	69	0.445		
	Total	32.014	73			
Barriers	Between Groups	2.463	4	0.616	1.044	0.391
	Within Groups	40.692	69	0.59		
	Total	43.155	73			

INTERPRETATION:

The above ANOVA table reveals that the factors of Paytm are insignificantly influenced by the demographic factor of monthly income. Since the values are more than 0.05. This indicates that the monthly income of a group have different opinion.

TABLE – 7 **CORRELATIONS**

PARTICULARS		Performance	Services	Reasons	Barriers
Performance	Pearson Correlation	1	.553**	.391**	-.0186
	Sig. (2-tailed)		.0	.0001	.0114
	N	74	74	74	74
Efficiency of services	Pearson Correlation		1	.589**	.0056
	Sig. (2-tailed)			.0	.0037
	N		74	74	74
Reasons	Pearson Correlation			1	.0196
	Sig. (2-tailed)				.0095
	N			74	74
Barriers	Pearson Correlation				1

	Sig. (2-tailed)				
	N				74

Correlation is significant at the 0.01 level (2-tailed).

Interpretation:

Performance of the Paytm is positively correlated with the services and reasons. Further, it is negatively correlated with the barriers. Service is positively correlated with the reason and the barrier is also positively correlated, however, there is some effect on it. Reason is positively correlated with the barriers.

CONCLUSION

In early days payment is made on cash basis. After, that the payment is made through cards but nowadays payment is made through the mobile apps. It is known as cash less transactions. They have the facilities of transfer the money or return back the payments. They need not carry any cash or cards to make payments. The usage of the smart phones are in vast level. Even uneducated people also using the smart phones and they are easily installing the app and using it. But they think there is some privacy and security issues to use it. Once the service provider is ready to promise and give assurance to the public about the safety and security they can with stand in the market and rank top. The user will be increased and the existing users will retain same. This study will help the service provider to make the changes for the growth and development of the services.

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**A STUDY ON WORKPLACE DIVERSITY IN PERFETTI VANMELLE PVT,
CHENNAI**

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INTRODUCTION

Workplace diversity exists when companies hire employees from various backgrounds and experiences. Many companies see workplace diversity as an investment toward building a better business. Although workplace diversity provides many benefits, it also poses many challenges to employees and managers. To reap the benefits of workplace diversity, employees and managers must understand the challenges and know how to effectively deal with them.

Workplace diversity is a people issue, focused on the differences and similarities that people bring to an organization. It is usually defined broadly to include dimensions beyond those specified legally in equal opportunity and affirmative action non-discrimination statutes. Diversity is often interpreted to include dimensions which influence the identities and perspectives that people bring, such as profession, education, parental status and geographic location.

The concept of diversity includes acceptance and respect. It means understanding that each individual is unique, and recognizing our individual differences. These can be along the dimensions of race, ethnicity, gender, sexual orientation, socioeconomic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies. It is the exploration of these differences in a safe, positive, and fostering environment.

It is about understanding each other and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity contained within each individual. Diversity is a set of conscious practices that involve understanding and appreciating interdependence of humanity, cultures, and the natural environment; practicing mutual respect for qualities and experiences that are different from our own;

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Understanding that diversity includes not only ways of being but also ways of knowing; recognizing that personal, cultural, and institutionalized discrimination creates and sustains privileges for some while creating and sustaining disadvantages for others; and building alliances across differences so that we can work together to eradicate all forms of discrimination.

Workplace diversity refers to the variety of differences between people in an organization. That sounds simple, but diversity encompasses race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background, and more. Diversity involves not only how people perceive themselves but also how they perceive others.

Those perceptions affect their interactions. For a wide assortment of employees to function effectively as an organization, human resource professionals need to deal effectively with issues such as communication, adaptability, and change.

Diversity management is a process intended to create and maintain a positive work environment where the similarities and differences of individuals are valued, so that all can reach their potential and maximize their contributions to an organization's strategic goals and objectives.

DIVERSITY IN RELATION TO CULTURE AND PERFORMANCE

As the importance of diversity in the organizational context has increased manifold, most organizations would like to research on diversity–organizational culture linkage, its effect on diversity openness, and between diversity and performance both at individual and organizational levels.

[Patrick \(2010\)](#) found that diversity determines not only the effects of the diversity within an organization but also the level of openness to dissimilarity characteristics among the organization's members, work groups, and culture.

Despite the technological wonders of today's communication, international relations require us to deal with one another on a person-to-person basis.

For this to be effective, one has to overcome language and stereotype barriers. This may require the mental elimination of terms like *alien* and view the individual as having a background that is different (Moran, Harris, & Moran, 2011).

[Simlin \(2006\)](#) found that as the age increases, the perception of diversity openness decreases, and hence it is important to orient the older employees also about the presence and need of diversity openness in organizations through training, workshops, group discussions, and so on.

To create opportunities for collaboration, global leaders must not only learn the customs, courtesies, and business protocols of their counterparts from other countries but must also understand the national character, management philosophies, and mind-sets of the people ([Hofstede, 1994](#)).

Researchers have suggested that diversity has enhanced performance by broadening the group's perspectives. There is a strong empirical confirmation that successful diversity management and a resulting improvement in organizational performance are positively correlated ([Ozbilgin and Tatli, 2008](#)).

However, there is a consistent finding that differences should be sought in moderation. Group members' ability to elaborate diverse information may also develop over time as members become more familiar with each others' perspectives and develop transactive memory.

This suggests that, especially for diverse work groups, it is important that they can reach more extended tenure, and that they are allowed a more extended start-up phase than more homogeneous groups ([Knippenberg, de Dreu, & Homan, 2004](#)).

In multidisciplinary teams, in the oil and gas industry, expertise levels of performance diversity were most strongly associated with team performance at moderate levels of diversity ([Van Der Vegt & Bunderson, 2005](#)).

NEED OF THE STUDY

- This analysis helps to find out how to manage the diversities within the organization.
- It aims at maintaining the friendly relationship between employee and employer
- The main need for the study to increase the performance of the employees within teams.
- This analysis enables the company to ensure involvement by every employees for achievement of goals.

OBJECTIVES OF THE STUDY

Primary Objectives:

- To study the work place diversity at Perfetti van melle.

Secondary Objectives:

- To find out how diversity is managed within the organization so as to achieve both individual and organizational goals.
- To find out how diversity is considered to be a better exercise in organization.
- To identity the best strategies of the organization in managing diversity.
- To find out maximum involvement of employees in teams under workplace diversity.
- To find out ways to increase awareness about work place diversity.

SCOPE OF THE STUDY

- Work place diversity focuses on the employee's relationship in the organization.
- It helps to focuses on the benefits of exchange of information between management and employees.
- The work place diversity helps to Evaluates the performance of Individual and teamwork
- It also helps to determine the various methods towards employee's commitment in diversity management.

REVIEW OF LITERATURE

David A. Thomas June 2001 .Stated that, the study develops theory about the conditions under which cultural diversity enhances or detracts from work group functioning. From qualitative research in three culturally diverse organizations, we identified three different perspectives on workforce diversity: the integration-and-learning perspective, the access-and-legitimacy perspective, and the discrimination-and-fairness perspective.

The perspective on diversity a work group held influenced how people expressed and managed tensions related to diversity, whether those who had been traditionally underrepresented in the organization felt respected and valued by their colleagues, and how people interpreted the meaning of their racial identity at work.

Julia Christensen, November 1993. Stated that, the article examines the forces that influence our understanding of and responses to diversity in the work place.

Conceptually, diversity may either be understood as variety, in which all people are regarded as unique individuals, or as difference, in which specific groups of people (e.g., nonwhites and women), are regarded as being different with respect to a dominant group (e.g., white men). From either perspective, today's work force is becoming increasingly diverse as a result of changes in immigration patterns; demographic trends; and

John Qin, September 1, 2012. Stated that, the rapid on-going demographic shifts in workplaces present challenges to Human Resource Development (HRD) scholars and practitioners, creating a significant demand for diversity initiatives that help organizations harvest diversity. To address inconsistencies in diversity research results and limitations of current diversity intervening process theories, the authors propose an extended intervening process model (EIPM) from the perspective of how group processes underlie the linkage between diversity and performance. .

Sheila Simsarian Webber and Lisa M. Donahue, April 2001. Stated that, a meta-analysis of the data from empirical investigations of diversity in work groups was used to examine the impact of two types of diversity attributes, highly job-related and less job-related, on work group cohesion and performance. This distinction was used to test the proposition that different types of diversity will differentially impact work group cohesion and performance. In addition, type of team was examined as a possible moderator of the relationship between diversity and performance.

David W. Pitts , 2011. Stated that, Public organizations in the new millennium are tasked with a myriad of human resource management challenges that stem from workplace diversity, but the field of public administration has not produced a body of research that adequately assists them with these struggles. In 2000, “greater contribution from public administration scholars to the body of research focusing on how human diversity can best be managed to produce positive results.” They found that existing research contributed little usable knowledge for diversity management policies and programs.

Eddy S.W., 2012 Stated that, as a stigmatized group, lesbian, gay, bisexual, transgendered (LGBT) individuals are vulnerable to employment discrimination and receive little legal protection. They have had to cope with discrimination and engage in identity management to conceal their sexual identity.

This study seeks to determine whether LGBT individuals, in anticipation of discrimination, have lower initial career expectations, espouse more altruistic work values, and make career choices based on those work values, when compared to heterosexual individuals.

Using data from a large survey of postsecondary students, we found that LGBT individuals, after controlling for age, visible minority status, and major of study, reported lower salary expectations than heterosexual individuals. LGBT individuals were also more likely than their heterosexual counterparts to espouse “altruistic” work values and to indicate a career choice in the nonprofit sector. We suggest that “altruism” may be an important work value that is related to a career choice in the public and nonprofit sectors.

RESEARCH METHODOLOGY

DESCRIPTIVE RESEARCH

Descriptive study is a fact finding investigation with adequate interpretation. Descriptive research design is concerned with the research studies with a focus on the portrayal of the characteristics of a group or individual or a situation.

The main objective of such studies is to acquire knowledge. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions who, what, where, and how. Although the data description is factual, accurate and systematic, the research cannot describe what caused a situation.

Thus, descriptive research cannot be used to create a causal relationship, where one variable affects another. In other words, descriptive research can be said to have a low requirement for internal validity.

PRIMARY DATA

These are the actual information which is received by the resolution from the actual field of research. It is the data which has been collected by the researcher for a specific purpose using questionnaire.

DEVELOPMENT OF THE QUESTIONNAIRE

Questionnaire given to the respondents was structured undisguised questionnaire. The same question in the same order when asked to all the respondents and purpose of data

collection was made known to them. The questions included dichotomous question, question including the use of scaling technique and open ended questions.

Types of questions

Closed ended question

Multiple choices

SECONDARY DATA

Secondary data are available generally from published and unpublished materials. The researcher collected data from the available books, journals and also relevant websites. Most of the information is collected from the company website www.perfettivanmelle.in www.perfettivanmelle.com.

LIMITATIONS OF THE STUDY

The project report was designed mainly on the belief that information provided by the respondent is correct.

- As the respondents are busy in their work they are not the forth coming to reveal the truth.
- Time was the major limitation factor in the research as allow collecting the data only within the prescribed time.
- The respondents were unable to spend time to share their views.
- Some of the respondent's opinion may be biased.

DATA ANALYSIS AND INTERPRETATION

SAMPLE SIZE DETERMINATION:

A pilot study is a small-scale methodological test intended to ensure that proposed methods and procedures will work in practice before being applied in a large, expensive investigation. The 25 samples to pre-test and check for the reliability of the questionnaire and also to determine a sample size of 170 from a larger population.

Determination of sample size = $(Z^2 * p * q) / E^2$

P – Probability of success

q – Probability of failure.

E = Error rate.

Z = value of normal distribution for the confidence level.

Here $z = 1.96$ for 95% confidence limit and $E = 0.05$

In our study,

The Probability of success (p) = $22/25 = 0.88$

The Probability of failure (q) = $3/25 = 0.12$

The sample size = $(Z^2 * p * q) / E^2$

$$= (1.96^2 * 0.88 * 0.12) / (.05^2)$$

$$= 162.26$$

$$= 170 \text{ samples (approximately).}$$

Therefore the samples that we are going to take for the study are 170 samples.

SAMPLING TECHNIQUES:

There are two types of sampling techniques they are Probability sampling and Non - probability sampling. The study makes use of the Probability sampling.

PROBABILITY SAMPLING

STRATIFIED RANDOM SAMPLING:

The sampling technique used is **Stratified Dis Proportionate Random Sampling.**

STRATIFIED DISPROPORTIONATE RANDOM SAMPLING

Each stratum is proportionate to the standard deviation of the distribution of the variable. Larger samples are taken in the strata with the greatest variability to generate the least possible sampling variance.

TABLE SHOWING STRATA- DEPARTMENTS IN THE ORGANISATION

DEPT / DESIGNATION	TOTAL
NPD	9
Engineering and projects	9
HR	10
Finance and accounts	9
P & T	20
M & E	9
R & D	10
Maintenance	9
Stores and Warehouse	9
Quality control	50
Production	170
IT	2
Total	316

TABLE SHOWING DISPROPORTIONATE STRATIFIED RANDOM SAMPLING

DEPARTMENTS	DISPROPORTIONATE SAMPLING
FINANCE & ACCOUNTS	5

HR	10
IT	2
P & T	17
M & E	4
ENGINEERING & PROJECTS	5
NPD	5
STORES & WAREHOUSE	4
MAINTANENCE	8
R & D	10
QUALITY CONTROL	20
PRODUCTION	80
TOTAL	170

STATISTICAL TOOLS

The statistical tools used for this study are:

1. Percentage analysis
2. Interval estimation
3. Weighted Average

FINDINGS, SUGGESTIONS AND CONCLUSION

SUMMARY OF FINDINGS

1. It is found that majority of the respondents belong to age group 20-25.
2. It is found that maximum of the respondents are male.
3. It is observed that maximum of the respondents have 6-10 years of experience with the organization.
4. It is found that majority of the respondents are known to the language of English.

5. It is found that majority of the respondents share diversity issues with their co-workers.
6. It is found that maximum of the respondents have the opinion that diversity in the work force helps in the work place is Team Building.
7. It is found that majority of the Strategies are adopted by the Organization for promoting effectiveness is employee assessments.
8. It is found that majority of the respondents, strongly agree the strategies adopted in the Organization.
9. It is found that majority of the Strategies in organization has been effective in promoting diversity in workplace is Working environment.
10. It is found that majority of the respondents are not given opportunity to provide suggestions to promote diversity programs..
11. It is found that maximum of the respondents, agree the cultural difference influence behavior within the organization. From the survey it is understood that the diversity in the work place requires various cultural backgrounds which has very good influence behavior within the organization.
12. It is found that majority of the respondents, agree the Team performance is better than individual performance.
13. It is found that majority of the respondents have feel that interaction with employees from different cultures.
14. It is found that majority of the programs specifically targeted towards different diversified groups is Mentoring program.
15. It is found that maximum of the respondents have feel that people who speaks different language.
16. It is found that as maximum of the respondents personal goals accomplished through workplace diversity exercise is Friendly relationship among employees.
17. It is found that as majority of the respondents creating methods to hold all employees for fair treatment and respectful behavior is sometimes.
18. It is found that majority of the respondents are ranked Recognition is the most effective to manage diversity.

SUGGESTIONS

- The company needs to create the awareness about employee diversity issues in the organization.
- The company needs to maintain good interaction with the employees.
- The company needs to encourage diversity in the workplace so that employees can perform to their highest ability.
- Create a workplace that is a forum for people to share opinions.
- Build a workplace where people speak to each other respectfully and listen to other points of view.
- Provide ongoing training opportunities focusing on diversity and inclusion from the top down, everyone required to attend.
- The diversity in the work place requires various cultural backgrounds which has very good influence behavior within the organization.
- Active participation in decision has to be concentrated in order to increase the level of participation in decision making so that achievement of goal and division of work can be improved.
- The organization can offer various meetings, seminars, conferences to enhance the skills of the employees. If many programs are offered the organizational as well as individual goals.
- Management need to concentrate on all departments and the programs offered in the organization.

CONCLUSION

The study is mainly aimed to manage the diversity among the employees in Perfetti Van Melle. The employees should be given effective training to improve the awareness of diversity. Diversity not only involves how people perceive themselves, but how they perceive others. Those perceptions affect their interactions. For a wide assortment of employees to function effectively as an organization, human resource professionals need to deal effectively with issues such as communication, adaptability and change.

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COMPUTERIZED ACCOUNTING PRACTICES OF SMALL BUSINESS

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Introduction

In a dynamic world, the availability and adoption of Information and Communication Technologies (ICTs) across the globe has altered the norm of the game and expectations of the new mode of economics activities. The norm of inter and transnational trading changed dramatically to admit the increasing number of financial transactions and trade-related activities that take place via the Internet and technologically assisted tools. The traditional view of small business record keeping suggest that it is a paper based and hand of to the accountant firm to prepare the annual tax return. Porter & Millar (1985) mentioned in this competitive advantage, over the years, information technology had played a major role, changing the nature of business who knows its effects. With the introduction of new technology and more user friendly software, computerized accounting system (CAS) appears to reduce the problems in book record keeping practice. Furthermore, with the new and rapid financial information, new updates and changes will be available for others in making decisions. Accounting plays a critical role in the success or failure of contemporary business institutions. Accounting systems are responsible for recording, analyzing, monitoring and evaluating the financial condition of companies, preparation of documents necessary for tax purposes, providing information support to many others organizational functions. Accounting systems provide a source of information to owners and managers of SMEs operating in any industry for the use in measuring financial performance. There are 566 Small and medium enterprises in Tanjavor. Most of the enterprises are very small and some are medium. Establishment of SMEs in research area is increasing day by day.

Review of literature

Accounting systems are responsible for analyzing and monitoring the financial condition of firms, preparation of documents necessary for tax purposes, providing information to support the many other organizational functions such as production, marketing, human resource management, and strategic planning. Without such a system it will be very difficult for SMEs to determine performance, identify customer and supplier account balances and forecast future performance of the organisation. The primary purpose of an accounting information system (AIS) is the collection and recording of data and information regarding events that have an economic impact upon organisations and the maintenance, processing and communication of such information to internal and external stakeholders (Stefanou, 2006).

When organizations adopt e-accounting, they usually discover that even though computerized accounting systems handle financial data efficiently, their true value is that they are able to generate immediate reports regarding the organization (Hotch, 1992). Prior to the advent of personal computers, businesses were limited to two methods for keeping track of financial data (Tavakolian, 1995).

One method was to install a mainframe computer and set up a data processing department. This approach had its own difficulties: the mainframe computer was expensive and many qualified ICT personnel were required to handle the various tasks involved in processing the accounting data. In most cases, large corporations were the only organizations that could afford such an expensive system. The other option was to have a manual accounting system. Such a system consisted of paper ledgers, typewriters and calculators. Each customer or vendor was on a separate ledger card which contained all the transactions for that company. Typewriters were used to type invoices and cheques, and all calculations were performed using calculators. The key drawback of the manual system was that it was possible for errors to be introduced into the system and that the error could go undetected for quite some time

Scope of the study

The research study has a wide scope. It covers various aspects it is useful in several ways to various peoples. It helps to find out the expectations of customer about tally software. It represents the customer satisfaction towards of Tally Accounting software ERP 9 with 6.4 GST in India.

Objectives of the study

- To study of customer satisfaction on computerized accounting package
- To study the complete range of tally software
- To identify factor purchase decision

Research Methodology

This study relied on a sample of systematically selected SMEs throughout the Country. We sampled 100 SMEs from the NBSSI database. SMEs in India are defined as firms employing less than 100 workers. Out of the 100 questionnaire sent out, 56 were received, representing 56%. The resulting response rate was expected for a survey of this type considering that empirical studies involving SME have been known to generate far lesser percentage response rates. The sample included both users and non users of e-Accounting systems. The survey instruments included open ended and closed Ended questionnaires. We also followed up with personal or telephone interviews with managers of these firms. In order to ascertain the benefits of e-accounting, we focused on SMEs that adopt accounting software in their Operations. Users of accounting software were selected from the cliental lists of some accounting software application providers

Selection of the Study Area

The study area of the present research work is Thanjavur District, Tamil Nadu. Though it is predominantly an agricultural district, now, it stands at the ninth place in the

state in terms of industrial production. The vast stretches of land utilized for coconut cultivation, the presence of adequate agricultural labourers and artisans, the emergence of an ambitious new generation of entrepreneurs and the gradual shift of people from agriculture to business and industry have changed the direction and complexion of the district into an industry-friendly region.

Collection of Primary Data

The present study is based on primary data. It is an empirical research based on the survey method. For collecting required primary data from the owners of SME

Sampling Design

In Thanjavur district, both Registered and Unregistered small business units are functioning. A list of Registered business units in Thanjavur District was obtained from the District Industries Centre, Thanjavur and a total of 50 Percent of Registered business units were functioning as on 31 st March 2015 in the study area. For the purpose of this study, only registered business units were taken which precisely constituted the population.

Data analysis

The characteristics of the firms based on, size, form, ownership, and gender and industry classifications. On the size classifications, the firms were grouped as: micro representing 10% of valid respondents, small (31%) and medium (59%). The form of business organization was also identified: Sole proprietorships were made up of 17% of the total respondent firms, 7% of the valid respondent firms were organized as partnership and the remaining 76% were organized as limited liability companies. Majority (79%) of the firms were male owned. Eight industries were identified and they are agriculture, representing 15% of valid respondents, manufacturing (40%), mining and construction (5%), wholesale and retail trade (16%), hotel and hospitality (9%), information technology (5%), medical service (7%) and general services (3%).

It suggests that almost all the respondents use computers in their operations and that all SMEs contacted use accounting softwares in their operations. This implies that majority of SMEs in India have adopted e-accounting systems. The result of this study showed that Pastel, Sun business System, Tally, Sage, Excel and QuickBooks are the kinds of accounting softwares that SMEs have adopted. The result revealed that majority of the SMEs (25%) are interested in excel based accounting system while 9% preferred the use of Sage accounting software

It shows the goals for implementing computerized accounting systems among SMEs in India. Out of 56 SMEs who use computers in their operations, 44 representing 79% of the respondents reiterated that the use of computer enables them to reduce cost, enhance clerical works, provide sufficient space to store data and process information for management decision. Two (4%) indicate that the use of computer has enabled them to effectively manage their cost of operation, 5% mentioned that their computer usage reduces clerical works, 4% use computer to facilitate storage of data while 8% of the respondents use computers to provide timely management information for decision making. With regard to accounting and finance functions of accounting software, almost all the respondents

indicated that they use the software for accounts receivables functions as well as accounts payables, inventory management, payroll, general ledger, fixed assets management, bank reconciliation and cash management. Eighty four percent of the SMEs are satisfied with the performance of their accounting software. It is only small number of the firms selected who were not very satisfied with the results of their accounting software.

It shows With the issue of the benefits of computerized accounting information in mind, a question was designed to explore the significance, prevalence and potential problems and challenges inherent in most Indian SMEs. The survey result shows that majority of the respondent's encounter problems in supply of electricity as 38% of the respondents say they have problems in accessing uninterrupted supply of power. The result shows that 25% of the SMEs contacted indicated that frequent breakdown of their accounting system is their next biggest problem. However, only 5 firms representing 8% indicated that they face all the problems listed. These include, inaccurate reports generated by the accounting systems, frequent breakdown of the system, inability of the system to support large volumes of data, lack of constant supply of power, inability to import or / and export data, and inability to fully comprehend and interpret the results from the system.

Findings and suggestions

The adoption level of CAS was established by assessing the extent to which the accounting system of the societies was computerized at different level. As shown the result 40.8% of the factories and societies had computers in their premises while 59.2% had no computers at all. This implies that 59.2% of the factories and societies had zero of adoption given they did not computers which is a critical pre-requisite of CAS adoption

The study found out that availability of information technology infrastructure is an important Factor that influences the adoption of CAS. Specifically lack of enough computers was found to be the main constrains of CAS adoption. Compared to human resource , cost and users perception, availability of infrastructure was the second most important constrains of CAS adoption. Availability of ICT infrastructure compared to CAS adoption had a correlation of 0.400 which is a positive correlation.

Effects of human resource computer proficiency on CAS adoption

Human resources computer proficiency considered in the study included computer literacy level, ability to implement CAS and relevant computers skills. The findings revealed that computer literacy level of the staff, mean of 3.2 and ability to implement CAS , mean of 3.4, are the most important elements of the human resource in respect to CAS implementation. As compared to cost, availability of infrastructure and users' perception, human resource proficiency was the third most important factor in determining the adoption of CAS

Human Resource has a correlation of 0.305 compared to 0.611 for Cost and 0.400 for Availability of Infrastructure.

User perception was considered in terms of how the managers as part of the staff who uses the system perceive the ease of use of the system. The perception on how useful CAS is in terms of easing workload and reducing errors was also considered as part of the users'

perception. The findings revealed that the managers perceived CAS as tool that can reduce workload and errors. They also perceived CAS as a means of reducing the cost of operation. However users' perception was not an important constrain to adoption of CAS since it only had a correlation of 0.203. The study revealed that regardless of the adoption level of CAS undertaken by the societies, managers perceived CAS favorably. In essence therefore perception of CAS did not affect its adoption.

The cost of CAS adoption was considered in terms of cost of hardware, software, consultancy fee and maintenance. The cost of other related infrastructure was also considered. The maintenance cost of CAS was found to be the most important element of cost. Compared to availability of infrastructure, human resource proficiency and users' perception, cost was the most important factor. Therefore coffee societies adoption of CAS was mainly affected by cost involved in all the aspects of implementation. Cost had a correlation of 0.611 which was the highest correlation compared to others.

Conclusion

The study sought to find the effects of availability of infrastructure on the adoption of CAS. The study concludes that cost, availability of resources and human resource proficiency in that order. Society's lacks enough computers along with other related infrastructure to enable them adopt CAS effectively. The available ICT resources are basic mostly used for administrative work and limited accounting operations.

The study also concludes that human resources in the coffee societies are not computer literate enough to implement CAS. This is mainly because their hiring procedure does not emphasize on ICT proficiency as qualification. The study shows that the managers are aware of the benefits associated with computerized accounting system and therefore they will be willing to implement computerized accounting system once installed in order to reap the benefits associated with accounting information system in case there is availability of funds to acquire ICT infrastructure and to train them how to work with such system effectively.

The cost of implementation is prohibitive. Apart from the initial investment, the recurrent cost such as maintenance and technical support are also a hindrance to CAS implementation. These challenges have resulted in partial implementation of CAS and in most cases complete none implementation. Though some coffee societies have computers they are mainly used for basic operations.

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