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## PROFESSIONALISM IN PUBLIC PROCUREMENT IN NIGERIA: A NEW FRONTIER FOR QUANTITY SURVEYORS

**FAMILOYE, OLAJIDE**  
**PRINCIPAL PARTNER**  
**STEVE-TIME ASSOCIATES**  
**LAGOS**

### ABSTRACT

*There is confusion about who a public procurement expert is. There is general claim between professionals involved in procurement process to believe that they are public procurement experts because often times they are engaged to serve as consultants or committee members in the various procuring entity. This paper looked at professionalism in public procurement with a view to discover who is really a public procurement expert. The paper adopted content analysis method to achieve its objectives. The result indicated that a public procurement expert is a professional certified by the Chartered Institute of Purchasing and Supply Management of Nigeria according to the extant law. For quantity surveyor to function properly as public procurement professional as envisaged by both Public Procurement Act 2007 and the Chartered Institute of Purchasing and Supply Management of Nigeria Act 2007, a registration with the Chartered Institute and the sitting and passing of the pre requisite examinations conducted by CIPSMN is desirable. It is recommended that our Universities and Polytechnics should include public procurement studies in the curriculum of Quantity Surveying. The QSRBN too should encourage younger generations of quantity surveyors to expand their competencies by seeking admission to membership of CIPSMN.*

### KEYWORDS

Nigeria, chartered institute of purchasing and supply act 2007, professionalism, public procurement, public procurement acts 2007.

### INTRODUCTION

The Nigeria Public Procurement Act 2007 became a law regulating public procurement process in Nigeria, like any other Country developing and/or developed nations with the same extant law, with the signing into law of the Act by the then President, late Alhaji Umaru Musa Yar Adua on the 4<sup>th</sup> June, 2007. By this law, Nigeria joined the League of Nations with a regulated public procurement process (Anago, 2011). According to Anago (2011), the Act remains a comprehensive piece of legislation that aligns with best practices anywhere in the world. Adewole (2014) states that the Nigeria Public Procurement Law 2007 is a commendable institutional reform agenda that the country embarked upon in recent years. Ameyaw, Mensah and Osei-Tutu (2012) says of Ghana Public Procurement Law 2003 (Act 663) as a comprehensive legislation designed to eliminate the shortcomings and organisational weaknesses which were inherent in procurement in Ghana. The Act 663 is to promote fairness, transparent and to ensure that public procurement is non-discriminatory (Ameyaw, Mensah and Osei-Tutu (2012). Jacob (2010) states that the PPA 2007 is to ensure transparency, competitiveness, value for money and professionalism in the public sector procurement system.

The need to reform the public procurement process of most nations especially developing nations became stronger in the 1990s. The International financial institutions were no longer willing to extend aids to national governments without a reformed public procurement process and also these national governments too were equally desirous of good governance. Reforming their public procurement process was a key step towards achieving good governance and obtaining value for money.

The steps taking towards the reform process were similar in almost all the nations. The national governments engaged the International financial institution in conjunction with the indigenous consultants to carry out the assessment of the existing public procurement process in the country. In Nigeria the government of President Olusegun Obasanjo constituted in 1999 the Country Procurement Assessment Committee comprising of the World Bank and indigenous professionals to carry out the necessary study to assess the existing public procurement process. The report showed that there was no specific law or other act of parliament regarding public expenditure or procurement in Nigeria and that what existed was 'Financial Regulations' (FR) which regulate and delegate the responsibilities of public and financial management at the Federal level (World, 2000). The FR was an administrative document which could be amended by the Minister of Finance, has no permanent measures for surveillance and control, relies almost solely on a high degree of self-control within the Ministries, department and agencies; no permanent body outside the purchasing entities monitoring and controlling the procurement process; no central policy making entity in the area of public procurement; no provision for filing of complaints concerning public procurement and no permanent body independent of the procuring entity where contractors/suppliers can file complaints regarding public procurement process (World Bank, 2000).

The World Bank report made two key recommendations related to improving the existing legal and regulatory environment. In the short term, the establishment of a Public Procurement Commission and the medium term the introduction of a Public Procurement law based on United Nation Commission on International Trade Law (UNCITRAL) (Familoje, Ogunsemi and Awodele, 2015). The Budget Monitoring and Price Intelligent Unit (otherwise known as Due process) was immediately established and the process of enacting the required law was set in motion which led to the enacting of the Act in 2007.

According to Thai (2009) public procurement is a system that consists of

- Procurement laws and regulations, procurement organizational structure (central procurement agencies, procurement offices in user departments)
- Procurement processes (from procurement authorization, appropriations to contract formation, contract administration, etc.)
- Procurement methods (invitation to bid or request for bids, request for proposals, request for quotations, etc.)
- Procurement techniques (life-cycle costing, evaluation, negotiations, etc.)
- Procurement professionalism and workforce.

Thai (2009) further compressed the above and said that a procurement system is built on four pillars: **procurement laws and regulations, procurement workforce, procurement process and methods, and procurement organizational structure**. This paper will be considering procurement professionalism and workforce and the position of the quantity surveying professionals in the successful operation of the Nigeria Public Procurement Act 2007.

### RESEARCH QUESTIONS

The following research questions will guide the paper:

1. Who is a public procurement professional?
2. Is quantity surveyor a public procurement professional?
3. What additional qualification is required for the quantity surveyor to become a public procurement professional?

### LITERATURE REVIEW

Under section 60 of the PPA 2007, the interpretation given to procurement is simply "acquisition" and there is nowhere in the Act where Public Procurement is defined like the Acts of other nations. Boswel and Walker (2004) as cited by Familoje (2012) defines procurement as a process that an entity initiating a project uses to achieve delivery of a project by obtaining services from both third parties and in-house providers, in conformity with applicable laws and regulations. On the other hand, Trinidad and Tobago (2004) defines public procurement as the process of acquiring property and services using public money to accomplish specified public purposes. Public procurement is the designated legal authority to advise, plan, obtain, deliver, and evaluate a government's expenditures on goods

and services that are used to fulfill stated objectives, obligations, and activities in pursuit of desired policy outcomes (Prier and McCue, 2009). Public procurement therefore is about spending tax payers' money for the provision of services for the good of the citizens. Onyema (2011) states that the Nigeria public procurement practice, before the enactment of the Act, has been known to be unprofessional, inefficient and ineffective. For public procurement to be professional, efficient and effective it must be handled by seasoned professionals in the field of public procurement. According to OECD-DAC (2006), a sound procurement system must have a competent professional workforce equipped with defined skills and knowledge for specified procurement jobs. The workforce must permeate virtually every effort within an agency, including successfully acquiring goods and services and executing and monitoring contracts" (Government Accountability Office (2005). Unfortunately, public procurement has been a neglected area of study even though governmental entities and public procurement practitioners have diligently worked to improve public procurement practices (Thai, 2001). In Nigeria today public procurement personnel are mostly drawn from various professions and are given two to three-week training to function as public procurement practitioners. To become a core professional should be more than short training and this has been responsible for lackluster performance of procurement function in the Country. A key recommendation of Uganda Country Procurement Assessment Report (2004) was to establish a procurement cadre in the civil service and restoring professionalism in the procurement function (Kalinzi, (2014).

Appelbaum & Lawton, (1990) as cited by Basheka and Mugabira (2008) defines a profession as a group of people organised to serve a body of specialised knowledge in the interests of society. Wikipedia citing New Statesman (1917) defines a profession as a vocation founded upon specialized educational training, the purpose of which is to supply disinterested objective counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gain. In the light of the above definition, quantity surveying is a profession in the building and engineering construction by their specialized educational training. Basheka and Mugabira (2008) say all professions like medicine, law, engineering, architecture, project management, and marketing among others have a duty to protect the professionalism demanded of those professions. Wikipedia says some of the characteristic traits of a profession are: **EXTENSIVE TRAINING** of an intellectual character, providing services vital to society's wellbeing, core practitioners usually with a high degree of autonomy in deciding how to carry out their job, practitioners who have undergone a process of certification or licensing by the state in order to be eligible to carry out certain tasks or provide certain services and Professionals are usually organized in "societies."

The Quantity Surveyor has been described as the expert who is concerned with financial probity in the conceptualization, planning and execution of development projects (refurbishment works inclusive) (NIQS, 2003). Quantity surveying, according to Marouf and Habib (2011), is concerned with controlling and managing the construction projects. A prospective quantity surveyor requires a specialized training in either a university or a polytechnic for about four to five years. To be professionally qualified the graduate trainee must write and pass the professional examination of the Nigeria Institute of Quantity Surveyors. Having passed the examination, the newly qualified approaches the Quantity Surveyors Registration Board of Nigeria for registration as a quantity surveyor. These steps must be complemented by attending the training and workshop organized by the Board and/or the Institute and/or any of the local chapters of the Institute spread across the nation. Anybody who practices quantity surveying without these training and certification is regarded as quack.

The role of quantity surveying profession in the procurement of public sector projects cannot be over emphasized. The quantity surveyor plays a central role in procurement process as consultants in both building, civil and heavy engineering works. According to Maarouf and Habib (2011), the traditional role of quantity surveying is concerned with contracts and costs on construction projects and quantity surveyors control construction costs by accurate measurement of the work required. Quantity surveyor produces cost estimates which enables budgetary and finance control, provides advice concerning contract strategy and taxation and prepares contract documents for procurement of consultants and contractors. Unfortunately, the above important roles in the procurement of infrastructural development of the Nation has not made the quantity surveyor a public procurement professional in the eye of the law.

Public procurement, on the other hand, is much more than the procurement of public sector projects. Public procurement is much more all-encompassing from the provisions of consumables in the offices to provision of medical supplies in our hospitals/instruction materials in our education institutions to construction of large dams, road networks, rails and airports among other projects a government needs for good governance. A public procurement expert is that professional so certified by the Chartered Institute of Purchasing and Supply Management of Nigeria (Establishment) Act, 2007 (CIPSMN Act, 2007). The CIPSMN Act 2007 in section 1 sub section 1(a) is empowered to determine and review, from time to time, the academic standards, knowledge and skills that shall be attained by persons seeking to qualify as registered members of the Institute and in subsection 1(c) says the Institute must ensure that its members maintain high standard of behaviour expected of any professional in purchasing, **PROCUREMENT**, store, materials, warehouse, logistics management or supply chain management in Nigeria.

By the letters of CIPSMN act 2007 anybody without a formal training and certification by the Institute must therefore not parade himself as a procurement professional either public or private. This is not to say that the quantity surveyor cannot function as a consultant in the realization of a procurement process. The Public Procurement Act 2007 does not help matters in the definition of who a public procurement practitioner is. In the appointment of the Director General, Bureau of Public Procurement in section 7 sub section 2 (c) the person to be so appointed should be a person who possesses the relevant and adequate professional qualification and shall have been so qualified for a period of not less than 15years. This is ambiguous. Will the professional qualification be in Law, Medicine, Quantity Surveying, Engineering, or Procurement? The Delta State Procurement Assessment Report (2007) falls short of the expectation of the CIPSMN by a detailed comment on Delta State Public Procurement Law as cited by CIPSMN (undated) "Limitation of Persons to be appointed Director General of the Commission read thus "It is recommended that the provision of S. 9 regarding appointee to the office of the Director General should be expanded to include persons from outside the civil service of not less than 15 years post qualification experience in law, engineering, accounting, purchasing and supply, economics or related fields. This position is widely criticized by the Chartered Institute of Purchasing and Supply Management on the expansion suggested by a Law firm on who can be engaged as the Director General of Delta State Public Procurement Agency. This seems to clarify the letters of section 7 subsection 2 (c) of the PPA 2007 which states that a person who possesses the relevant and adequate professional qualification and shall have been so qualified for a period of not less than 15 years shall be appointed as the Director General of BPP. This must be the reason why the former Director General of BPP, Engr Emeka Eze was so appointed on the basis of his qualification as COREN registered Engineer and Engr Ahmed Abdu who is also a member of the Nigerian Society of Engineers, Nigerian Institute of Building and Procurement Professional Association. None of the two Director Generals ever possess any qualification or ever be certificated by CIPSMN. The Bayelsa State Public Procurement Law (2009) says of the qualification of the Director General (DG) of the State Bureau of Public Procurement Act (2009) in section 7 subsection 1 (b) that the person to be appointed as the DG shall have the qualification to contest for the State House of Assembly. This is the worst provision in all the procurement laws. The Constitution of the Country only requires someone to have School Certificate to contest into the house of assembly even the presidency. This position of the PPA 2007 has always been contested by the CIPSMN that a professional qualification in any profession either Architecture, Law, Quantity surveying, etcetera does not make a person a public procurement personnel.

The above scenario does not mean that the other professionals like Medicine, Architecture, Engineers, Quantity Surveyors, and etcetera cannot act as Consultants in their related field of competencies. The Architects, The Engineers and the Quantity Surveyors will still play their expected roles in the procurement of infrastructures while the Medical Doctor or the Pharmacist will partake in the procurement of medical supplies purely as consultants. These roles which are specialized professional callings where individual is licensed to practice does not make them public procurement professional by virtue of the provisions of the CIPSMN Act 2007.

The World Bank Procurement Assessment Report (CPAR) 2000 as cited by CIPSMN (undated) reported that "The procurement function is not generally performed by professionally qualified staff. Although, there is a shortage of such staff in the public service, even the few available are not properly utilized. The ad hoc training given to professionals in other fields to become public professionals are hardly enough to make them core public procurement professionals. This is why the profession suffers from the hand of the Management because it is believed to be a profession for anybody. There is a tendency to believe that the procurement function can be performed by anybody and hence the procurement function is held in low esteem (World Bank, 2000). World Bank 2000 states that the majority of practitioners of public procurement in the Nigeria today cannot be said to possess the needed specialized knowledge to function effectively because majority of them underwent only about two to three weeks training. According to Kalinzi (2014), all professions like medicine, law, engineering, architecture, project management, marketing, quantity surveying among others have a duty to protect the professionalism demanded of those professions. Procurement too, is one of the new and interesting professional disciplines with an ethical code to protect; but the profession is still in its infancy. It must be stated that procurement borrows

heavily from other professions to make it comprehensive, for example; it borrows from law, business management, management, organization behaviour and human resources, finance, marketing and others. Therefore, two to three weeks training program are definitely not enough to produce a sound professional by the definition of who a professional is.

The report of the World Bank (2000) states further that procurement training is offered by few institutions in Nigeria and that the Institute of Purchasing and Supply Management of Nigeria is the only organization which has, for many years, provided training in public procurement and promoting professional standing of procurement staff, and their skills. If what Goode (1960) as cited by Hurd (1967) that the core characteristics of a profession are a prolonged **specialized training** in a body of abstract knowledge, and a collectivity or service orientation is to go by, the only competent professionals to undertake public procurement administration are those certified by CIPSMN (2007) as administrators.

Recently a firm offering to provide services to Bureau of Public Procurement (BPP) as procurement process auditors was disqualified on the basis of not registering with Council of Registered Engineers of Nigeria (COREN). This according to the firm was wrong and not in accordance with the letters and spirit of PPA 2007 and CIPSMN 2007. It should be stated that procurement process audit is quite different from core engineering services which can only be undertaken by registered COREN members. IBIAM OGUEJIOFO & ASSOCIATES (2014) states that procurement process audit is the systematic, independent and documented process for obtaining procurement process evidence and evaluating it objectively to determine the extent to which criteria are fulfilled.

The functions of a procurement officer, according to Kalinzi 2014, include regular spot check of procurement transaction including the files, goods and services with all suppliers to ensure they are bona fide companies, ensure adequate procurement planning such as identification and assessment of risks, capacity to address such issues in the business unit and preparing annual reports on procurement activities and reporting instances of fraud and corruption on a timely manner among other functions.

It must be agreed that there is confusion out who a public procurement expert should be. Familoye, (2012) and Nigeria Institution of Quantity Surveyors (NIQS), Gombe State Chapter as cited by IBIAM OGUEJIOFO & ASSOCIATES (2014) solicited for the inclusion of Quantity Surveyors in the Nigerian Council of Public Procurement. The Quantity Surveying Registration Board of Nigeria (QSRBN) too had submitted for an amendment to the PPA 2007 to include Quantity Surveyors to the Nigeria National Assembly. There is nothing wrong in the inclusion of quantity surveyor on this list where we have Nigeria Bar Association, Civil Society and even the Media. It was even recommended the inclusion of a Chartered Accountant in the Council because the Minister of Finance may not be an accountant (Familoye, 2012). Any member of the Council cannot on the basis of their inclusion parade himself as procurement personnel as they play advisory role to government.

## RESEARCH METHODS

This paper adopted content analysis research method which is the analysis of what is contained in a message. The research was essentially documentary. In this regard, the Public Procurement Act 2007, Chartered Institute of Purchasing and Supply Management Act 2007, Bayelsa State Public Procurement Law (2209) and other literature materials were used to answer the questions arising from the research. Content analysis is a method where the content of the message forms the basis for drawing inferences and conclusions about the content. This, according to Prasad 2008), is a scientific study of content of communication.

## FINDINGS

There is confusion about who a public procurement expert is. A public procurement expert is a professional certified by the Chartered Institute of Purchasing and Supply Management of Nigeria. The mere fact that many professionals contribute to public procurement process should not be confused with the expertise in public procurement. The core competency of a public procurement expert includes regular spot check of procurement transaction including the files, goods and services with all suppliers to ensure they are bona fide companies, ensure adequate procurement planning such as identification and assessment of risks, capacity to address such issues in the business unit and preparing annual reports on procurement activities and reporting instances of fraud and corruption on a timely manner among other functions. This is different from the core competency of either the Engineer, the Quantity Surveyor, Architect, Estate Surveyors, etcetera whose functions have been defined by their respective professional bodies. It has been established that adequate staff training influences compliance to Public Procurement and Disposal Act in Kenya (Ndumbi and Okello (2015). There is therefore the need for a formal training in public procurement as required by the law setting up the Chartered Institute of Purchasing and Supply Management of Nigeria Act (2007) for anybody to be recognized as public procurement expert.

## CONCLUSIONS AND RECOMMENDATIONS

Quantity surveyors as both the legal experts and the accountants of the construction industry must widen their scope in the total procurement process by diversifying their expertise to areas like public procurement among others to ensure that they not only function as Consultants in the building and Civil Engineering procurement but in the total government procurement. A time will come when the letters and the spirits of the Chartered Institute of Purchasing and Supply Management of Nigeria Act 2007 will be followed and the heads of the BPP and all the procurement committees must be headed by core professionals certified by the CIPSMN. Governments too must have the political will to obey their laws because law is useless if it is not obeyed (Jacob, 2010). Our University and Polytechnic must not only include public procurement courses in quantity surveying curriculum, they must emphasize public procurement as area of specialization in quantity surveying to take the advantage of the new emerging markets.

Therefore, quantity surveyors, especially the younger generations, by our vintage position in procurement process must strive to become public procurement experts. Let us expand our competence by registering with the Chartered Institute of Purchasing and Supply Management and proceed to take their prescribed examinations. This is necessary because quackery is evil that must be fought by all professional either in quantity surveying or supply chain management.

## REFERENCES

1. Adewole, A. (2014). Governance Reform and the Challenges of Implementing Public Procurement Law Refrom across Nigerian State and Local Governments. *International Journal of Public Administration and Management (IJPAMR)*, 2 (4), pp 25-32.
2. Ameyaw, C., Mensah, S. and Osei-Tutu, E (2012). Obstacles to the procurement reforms in Ghana. *Journal of Public Procurement and Contract Management*, 1(1), 54.
3. Anago I. T. (2011) *Public Procurement Act – A Vehicle for Accountability and Value – For Money in Construction and Building*. A Paper presented at the 1<sup>st</sup> National Building and Construction Economic Round Table (BCERT), Abuja, Nigeria.
4. Appelbaum, D. and Lawton, S.V. (1990). *Ethics and the Professions*. Englewood Cliffs, NJ: Prentice Hall.
5. Bashaka, B.C. and Mugabira, M.I. (2008). Measuring professionalism variables and their implication to procurement outcomes in Uganda. *3<sup>rd</sup> International Public Procurement Conference Proceedings*.
6. Boswell, P and Walker, L. (2004) *Procurement and process design*. Geneva, London, United Kingdom.
7. Chartered Institute of Purchasing and Supply Management of Nigeria (undated). Public Notice: Nigeria Procurement Laws and Those that undermines it. Retrieved from [cipsmn.com/public\\_notice](http://cipsmn.com/public_notice) on 4 June, 2016.
8. Familoye, O. (2012). *Appraisal of the Application of Public Procurement Act 2007 By Public Sector Clients in Nigeria*. An Unplished Thesis submitted for the Award of M. Tech. in Quantity Surveying, The Federal University of Technology, Akure, Nigeria.
9. Familoye, O., Ogunsemi, D.R and Awodele, O.A. (2015). *A Comparative Analysis of Nigeria Public Procurement Act 2007 with Selected International Procurement Acts*. Paper presented at the Environmental Design and Management International Conference on Responsive Built Environment held at Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile Ife, Nigeria, 9 - 12 March, 2015. pp 173-182.
10. Federal Government of Nigeria. (2007) *Chartered Institute of Purchasing and Supply Management Act*. Lagos, Nigeria: The Federal Government Printer.
11. Federal Government of Nigeria. (2007) *Public Procurement Act*. Lagos, Nigeria: The Federal Government Printer.

12. Goode, W.J. (1960). Encroachment, Charlatanism, and the Emerging Profession: Psychology, Sociology, and Medicine, *American Sociological Review*, XXV (December, 1960, 903.
13. Government of Bayelsa State (2009). Bayelsa State Public Procurement Law, Yenogoa, Nigeria.
14. Hurd, H.G. (1967). Who is Professional? *Journal of Cooperative Extension* pp 77-84.
15. IBIAM OGUEJIOFO & ASSOCIATES (2014). A Protest letter to the Chartered Institute Purchasing and Supply Management of Nigeria.
16. Jacob, O.A. (2010). Procurement Law in Nigeria: Challenges for Attainment of its Objectives. *University of Botswana Law Journal*. pp 131-151.
17. Kalinzi, C. (2014). Level of professionalism in public procurement: A survey of selected districts in Uganda. *Net Journal of Business Management*, 2(1), pp 1-7.
18. Ndumbi, C.W. and Okello, B. (2015). Effect of Staff Training on Level of Compliance to Public Procurement System in Parastatals in Kenya. *International Journal of Economics, Commerce and Management*, 3(6), pp 613 – 626.
19. Onyema, E. (2011). Challenges and Prospect of Public Procurement in Nigeria: An Analysis, the Nigeria World, September 2.
20. Prier, E and McCue, C. P. (2009). The Implications of Mudle Definition of Public Procurement. *Journal of Public Procurement*, 9 (3&4), pp 326 – 370.
21. Republic of Trinidad and Tobago (2004). Reform of government procurement regime: A green paper.
22. Thai, K.V. (2001). Public procurement re-examined. *Journal of Public Procurement*, 1(1) pp 9-50.
23. Thai, K.V. (2009). Preface to International Handbook of Public Procurement. Public Administration and Public policy/146. CRC Press, New York.
24. World Bank (2000) *Country Procurement Assessment Report, Volume 1, Summary of Findings and Recommendation*. Lagos: Policy Disclosure Authorized.

# A STUDY ON CHALLENGES OF HANDLING NEWLY IMPLEMENTED HOSPITAL INFORMATION SYSTEM, JOB SATISFACTION AND WORK LIFE BALANCE AMONG ADMINISTRATIVE EMPLOYEES OF MULTISPECIALTY HOSPITAL

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## ABSTRACT

Data was collected from 88 administrative staff of multispecialty hospital through questionnaire method and data was analysed by Structural Equation Modelling (SEM) method. Results showed that over all, respondents were satisfied with their job (3.70±.92 on 5-point rating) but 60 percent of the respondents had Work Life Imbalance and 70.5% had difficulties in handling new HIS. SEM results showed that challenge in handling new HIS had a positive impact on Work life imbalance ( $\beta=0.562$ ,  $p<0.001$ ), whereas had no significant direct impact on job satisfaction ( $\beta=-0.012$ ,  $p>0.05$ ) but had significant indirect effect on Job satisfaction ( $\beta=-.359$ ,  $p<0.001$ ), where WLB had shown mediating effect between challenges in handling new HIS and Job satisfaction.

## KEYWORDS

health information system, work life balance, job satisfaction and administrative employees.

## 1. INTRODUCTION

Hospital is a complex organisation involving activities of heterogeneous groups of employees such as doctors, nurses, paramedical and administrative staffs, all working with a common goal of providing quality medical care to the patients. There is increase in volume of patients accessing hospital services with expectations of receiving quality health care facilities<sup>1</sup>. To provide quality health care to the patients, management of information is crucial in hospitals, especially in multispecialty hospitals. Use of computers in hospitals found to be beneficial to cost containment and overall quality improvement in the patient care as quick availability of complete information improves the diagnosis and treatment thereby reducing the patients length of stay in hospitals. Such computerised information technology in the hospitals is Hospital Information System (HIS). HIS is used in the functional areas of the hospital such as: admissions, laboratories, radiology, pharmacy, nursing, medical records, accounts, personnel and administration. HIS automate the patient's administrative activities such as: scheduling of appointments, patient profile information, billing and the clinical care activities: such as computerised prescriptions, clinical notes, digital radiological imaging, and online laboratory results. Ultimately it has the capability of eliminating paper processes in the health delivery system. This aims at creating a resource efficient, more cost effective, informed health care service that can be utilised by all.<sup>2</sup> According of Sneider (1987), HIS is a hospital wide system or is a network of systems designed to help the flow of information between departments.<sup>3</sup> This definition highlights that HIS should work in integration with non-medical systems such as human resources, accounting and inventory besides medical systems.

Since HIS fully automate all the work it improves the work environment, thereby improves the work efficiency and improves employee's morale also.<sup>4</sup> Some authors suggest that computerisation of hospital information system will increase job satisfaction because it frees the person from mundane clerical tasks.<sup>5</sup> On the other hand various studies showed that HIS implementation and adaptation is difficult task in different business areas and in hospitals is a very complicated task compared to other business areas.<sup>6,7,8,9,10,11,12</sup> Some of the difficulties are: software immaturity, end user profile and resistance, support after implementation, lack of knowledge about software implementation and ignorance of administrative requirements of hospitals. Counte et al., (1987)<sup>13</sup> pointed out that changing from manual to computerized procedures can make radical changes in the work life Balance(WLB) of an individual. He also commented that these types of technology influence individual job functioning, particularly for those whose jobs are most impacted by the computer, the clerical/Administrative staff. Work life balance (WLB) is the degree to which an individual's effectiveness and satisfaction in work and family roles are adaptive with the individual's life priorities.<sup>14</sup> WLB and Job satisfaction are powerful parameters to promote individual and organizational effectiveness. It is the core of HRD's major functions, can be a powerful leverage point for promoting individual and organizational effectiveness.<sup>15</sup> However, because of complex workflows of hospitals, usage of HIS in healthcare brought some difficulties for the end users especially administrative staff. Hardly any studies found dealing with difficulties in handling newly implemented HIS and impact of this on job satisfaction and Work Life Balance (WLB). This study is taken up to provide a greater understanding with **OBJECTIVES** -

1. To assess the difficulties in using newly implemented HIS (challenge).
2. To evaluate work life balance/imbalance and job satisfaction
3. To measure the impact of level of difficulties in handling HIS on WLB and Job satisfaction.

## 2. METHODOLOGY

This study is a descriptive and cross sectional in nature and adopted to measure the extent of impact of challenges experienced by the administrative employees in handling newly implemented HIS on work life balance and job satisfaction. Data was collected from administrative employees of a Multispecialty teaching hospital in Mangaluru, Karnataka State. Administrative employees mentioned here are not health care professionals like doctors, nurses and technicians, they are



basically clerks<sup>5</sup> of Medical Records Department, registration counter, medical stores, general stores, billing section and department secretaries. Questionnaire (explained under measures) method of data collection was adopted and received 88 duly filled questionnaire with response rate of 73.3percent. There were three parts in the questionnaire - in the first part, had items on demographic variables, in the second part consisted of Measurement of Work Life Balance and third part involved items to measure the level of difficulty experienced in handling new HIS and level of satisfaction.

## 2.1 MEASURES

In order to obtain data on the chosen variables the various scales were used: the degree of WLB was measured using 5 items of Work Family Conflict (WFC) and 5 items of Family Work Conflict (FWC) using a scale developed by Netemeyer, Boles and McMurrian (1996)<sup>16</sup>. In this scale all the items were rated on 7 point rating scale from 1(strongly disagree) to 7(strongly agree). Higher the score measures more of imbalance or conflict. Responses of 5 items were summed and averaged to measure WFC and FWC. Respondents having mean score above 4 are considered as presence of WFC and FWC. Presence of at least WFC or FWC was considered as presence of Work Life imbalance. Items of WFC and FWC showed reliability index, cronback alpha, as 0.912 and 0.901 respectively.

The degree of job satisfaction was measured using 3 items scale developed by Cammann, et al., (1983)<sup>17</sup>. Items were rated on 5 point rating scale from 1(strongly disagree) to 5(strongly agree). Sample item is "All in all, I am satisfied with my job". Responses of 3 items were summed and averaged to measure job satisfaction. Cronback alpha of this scale was 0.834.

To measure the challenges in handling newly implemented HIS (Technology) single item was constructed: "I have difficulties in handling HIS", rated on 5 point rating scale from 1(strongly disagree) to 5(strongly agree). Higher the score measures higher the difficulties. Score more than 3 is inferred as difficulty present.

## 2.2 STATISTICAL ANALYSIS

Collected data was summarised by frequency, percentage, mean and standard deviation. Structural Equation Modelling (SEM) technique was adopted to assess the relationships and impacts among the parameters. Data was analysed using SPSS software of version 23.

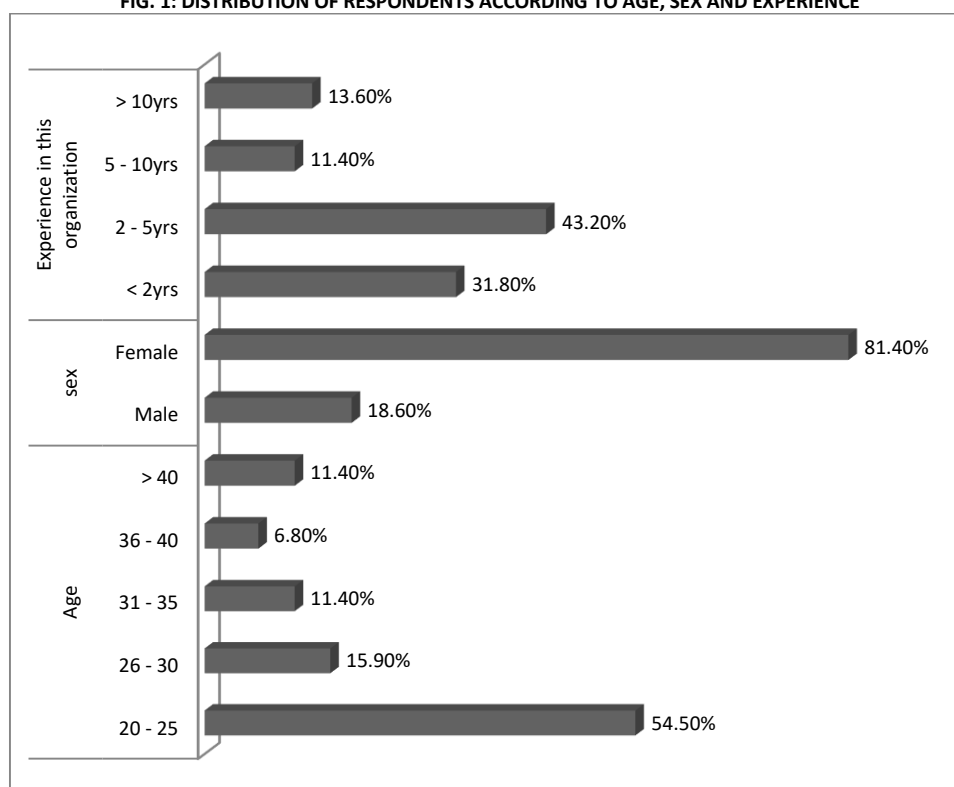
## 3. RESULTS AND DISCUSSION

This section involves analysis, interpretation and discussion of primary data collected from the respondents and provided with five sub sections.

### 3.1 DEMOGRAPHIC DISTRIBUTION

Majority (54.5 percent) of administrative employees were young and belonging to the age of 20 – 25 yrs. Rest of them were almost equally distributed in the various age groups. Majority (81.4 percent) were females and 18.6 percent of them were males. Majority (75 percent) of them had below 5 yrs of experience and 11.4 percent had 5 – 10 yrs, 13.6 percent had an experience of more than 10 years of experience.

FIG. 1: DISTRIBUTION OF RESPONDENTS ACCORDING TO AGE, SEX AND EXPERIENCE



### 3.2 MEASURING CHALLENGES IN HANDLING NEW HIS

Analysis showed that 70.5 percent of employees had difficulties in handling newly implemented HIS. Over all on an average, level of difficulty was 3.36 (>3) with S.D= 1.16. (Table1). Even Sagioglu, & Ozturan, (2006)<sup>18</sup> also found in his study that most of the end users of HIS were not happy with using different systems as integrated, because they required to learn different screens, menus and different terminologies of HIS. Large amount of end users had difficulties with workflows of HIS and even they were not satisfied with the content and mythology of training. Our study also observed that employees had difficulties in handling with newly implemented HIS in the routine work of the hospital.

TABLE 1: DISTRIBUTION OF RESPONDENTS WITH AND WITHOUT DIFFICULTIES IN HANDLING NEW HIS

Difficulties	Prevalence		Assessment
	No. of respondents	Percent	Mean ± S.D
Absent	26	29.5	3.36±1.16
Present	62	70.5	
Total	88	100.0	

### 3.3 MEASURING WORK LIFE BALANCE (WLB)

As explained under section 2.1, WLB was measured using scale developed by Netemeyer, Boles and McMurrian (1996)<sup>16</sup>. 5 items of WFC was summed and averaged, if this score > 4 then considered as respondent has WFC. Similarly, FWC was also obtained. Table 2 shows the presence of WFC, FWC and both WFC and FWC. It is interesting to know that 38.6 percent of the employees had Work Family Conflict and 15.9 percent had both Work Family Conflict and Family Work



Conflict, none of them had FWC alone. Over all, more than 50 percent of the employees had Work Life imbalance. So prevalence of Work Life imbalance more than 50% and which is mainly because of influence of work on the family domain. So among hospital administrative employees spill over of work on family domain has been observed and work in the organisation was not affected by their family issues. This result is agreeing with many other studies done by other authors in this area. Studies on consequences of Work Family Conflict (WFC) showed that negative influence in the family domain results in lower life satisfaction and greater inter role conflict of the employees and also it results in psychological distress and wellbeing of employees.<sup>14,16,19, 20</sup> Organizations must ensure that there is a work life balance to their employees, which will pave the way for better performance, improved morale and results in higher job satisfaction, which will ultimately help to improve the organization's performance and profitability in the health care sector

**TABLE 2: DISTRIBUTION OF RESPONDENTS WITH WORK LIFE BALANCE AND CONFLICT**

	No. of respondents	Percent
Balance	40	45.5
WFC	34	38.6
FWC	0	0
WFC & FWC	14	15.9
Total	88	100.0

**3.4 MEASURING JOB SATISFACTION**

Job satisfaction was measured by 3 items devised by Cammann, et al., (1983)<sup>17</sup>. Responses of these 3 items were averaged and overall score was obtained. For this overall score mean and S.D was calculated to assess the job satisfaction Analysis of job satisfaction scale showed that administrative employees are satisfied with their job with mean score 3.70 (>3) and standard deviation 0.92.

**TABLE 3: ASSESSMENT OF JOB SATISFACTION**

	N	Minimum	Maximum	Mean	Std. Deviation
Job satisfaction	88	1.00	5.00	3.70	.92

**3.5 TO MEASURE THE IMPACT OF LEVEL OF DIFFICULTIES IN HANDLING HIS ON WLB AND JOB SATISFACTION**

To measure the impact of difficulties in handling HIS (Technology) on WLB and Job Satisfaction Structural Equation Modelling by Maximum likelihood method was adopted. In SEM method ensuring the model fit is very important. According to Hair et al., (1998)<sup>21</sup> and Schumacker and Lomax, (2004)<sup>22</sup>, specific indices appropriate are chi square/d.f, GFI, AGFI, RMSEA, NFI and CFI and were represented in the Table 4. Model fit indicators exhibited a good fit, as chi square/d.f <2, AGFI, GFI, CFI and NFI are greater than 0.9, RMSEA is less than 1 (Hair et al.: 1998), between the data and conceptualized model. (Fig. 2).

SEM results (table 5 and fig 2) showed that difficulties in handling newly implemented HIS has positive significant ( $p < 0.001$ ) impact on WLB with  $\beta = 0.57$ ,  $p < 0.001$  and there was 32percent ( $R^2 = 0.32$ ) influence on WLB. Administrative employees, those who have experienced increased level of difficulties in handling HIS have exhibited increased level of Work Life imbalance.

Impact of difficulties in handling newly implemented HIS on Job satisfaction was  $\beta = -0.011$ ,  $p > 0.05$ , shows difficulties in handling newly implemented HIS has no significant direct impact on job satisfaction. But has significant indirect negative effect on job satisfaction with  $\beta = -0.359$ ,  $p < 0.001$  (Table 6). From the path analysis (fig 2 and table 6) it is clear that those who had difficulties in handling newly implemented HIS, had shown significant lower job satisfaction indirectly through Work Life imbalance. This proves that WLB mediates the impact of difficulties in handling newly implemented HIS (technology) on Job satisfaction. Influence of direct effect of Work Life imbalance and indirect effect of level of difficulties in handling newly implemented HIS was 41percent ( $R^2 = 0.41$ ). These observations are very much consistent with various other studies.

Studies have shown that employees of the hospital are affected by workforce changes due to high rate of competition and technological advancement in the industry. Changes in the work culture, work style, work demands, and family needs have an adverse influence on employees' work-life balance and job satisfaction.<sup>23,24,25</sup> Improvement in the Quality of work life balance influence positively on employees job satisfaction.<sup>26,27</sup> Higher Job Satisfaction leads to better performance, healthy lifestyle behaviour, subjective well being, occupational commitment and lesser the Turnover Intention.<sup>28,29,30,31,32</sup>

The HIS provides the required information to each level of the management at the right time, in the right form, and in the right place, so that the decisions to be made effectively and efficiently. The HIS plays a vital role in planning, initiating, organizing, and controlling the operations of the systems of the hospital and thus provides a synergistic organization in the process. It improves patient care by accessing data and making recommendations for care and enables a hospital to move from retrospective to a concurrent review quality and appropriateness of care.<sup>33</sup> But employees find it difficult to access and use immediately after implementation, because of many barriers - rejection of new technology by the users, lack of involvement and participation of users during the design and implementation of the system, integration with healthcare workflow, and important one is non-trained users.<sup>34</sup> As Goldstein and Gilliam, (1990)<sup>35</sup> pointed out Training is one of effective strategy to give the new knowledge and skill to employee to do a job effectively. So hospital must provide regular training programs to educate people on how to use the system, plus address attitudes and build enthusiasm for doing so. Appropriate techniques, training and high-quality training materials are required for successful system implementation and usage.<sup>34, 36</sup>

**TABLE 4: FIT INDICES OF STRUCTURAL MODELS**

Fit Indicators	value
Chi square/d.f	.68/1=.68, p=.406, NS
GFI	.996
AGFI	.960
RMSEA	.001
NFI	.992
CFI	.988

**TABLE 5: SEM RESULTS- PATH ANALYSIS WITH STANDARDIZED BETA VALUE**

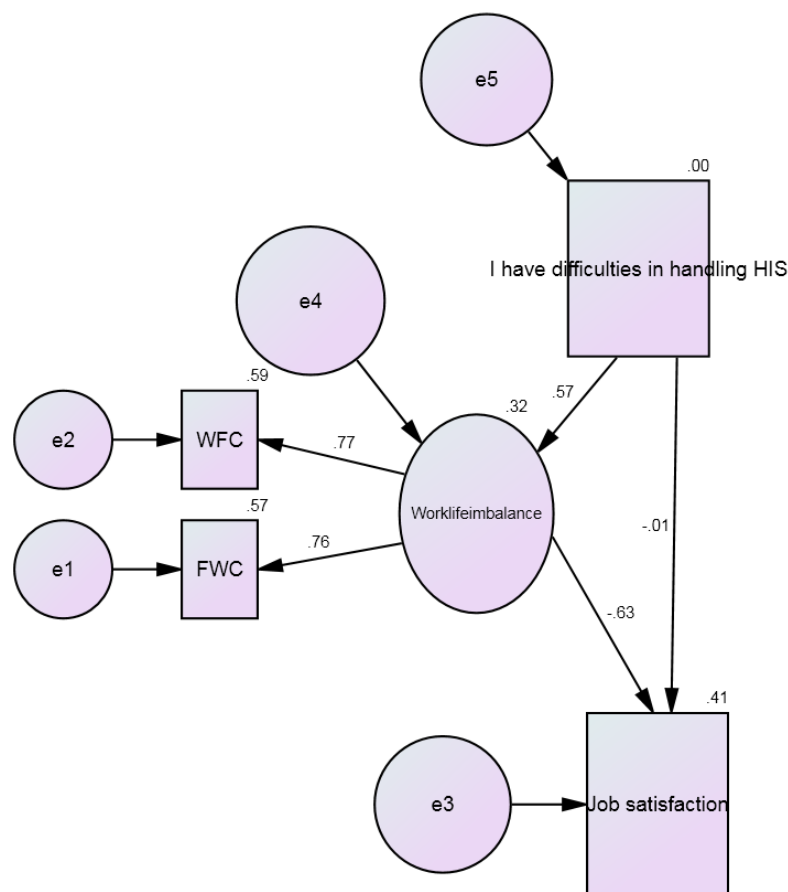
PATH			Standardized beta	p value
Job satisfaction	<---	Work Life imbalance	-0.633	$p < 0.001^{**}$
FWC	<---	Work Life imbalance	0.758	$p < 0.001^{**}$
WFC	<---	Work life imbalance	0.768	$p < 0.001^{**}$
Work Life imbalance	<---	I have difficulties in handling HIS	0.562	$0.001^{**}$
Job satisfaction	<---	I have difficulties in handling HIS	-0.011	0.932

**\*\* Highly significant \*sig**

**TABLE 6: DIRECT AND INDIRECT EFFECTS**

Direct Effects	Job satisfaction	Work life imbalance
Work life imbalance	-0.733	0.000
Difficulty in handling new HIS	-0.015	0.613
Indirect effects		
Work life imbalance	0.000	0.000
Difficulty in handling new HIS	-0.359	0.000

FIG 2: SHOWING PATH DIAGRAM OF IMPACT OF DIFFICULTIES IN HANDLING HIS ON WLB AND JOB SATISFACTION



#### 4. CONCLUSION

In India due to the privatization in healthcare sector, hospitals are facing great competition. They are confronted with different variety of challenges posed by the business environment internally and externally. Hospital administrative employees are also affected by workforce changes due to high rate of competition in the sector and technological advancement. Changes in the work style, work culture, work demands and family needs, have an inverse influence on employees' work-life balance, and job satisfaction.<sup>25,37,38</sup> Present study showed that challenges in handling newly implemented HIS has negative impact on Work Life Balance among administrative employees of the health care industry. Also WLB has shown mediating effect between job satisfaction and newly implemented technology. Regular training need to be provided to the employees to overcome the difficulties so that it will improve their performance and patients will get quality care from the hospitals.

#### 5. LIMITATIONS OF THE STUDY

Only administrative staffs of the hospital where HIS implemented were included in the study, not all the end users of HIS like nurses and doctors. Similar studies can be carried out on nurses and doctors also as they also are end users of HIS.

#### REFERENCES

1. Saini AK. Management Information System (MIS) in Hospitals: A Computer-based Approach for Quality in Hospital Services and Administration. Deep and Deep Publications; 1999.
2. Cline GB, Luiz JM. Information technology systems in public sector health facilities in developing countries: the case of South Africa. BMC medical informatics and decision making. 2013 Jan 24;13(1):1.
3. Sneider RM. Management Guide to Health Care Information Systems. Aspen Publishers, Inc.; 1987 Jul 1.
4. Teo TS, Wong PK. An empirical study of the performance impact of computerization in the retail industry. Omega. 1998 Oct 31;26(5):611-21.
5. Hodge MH. Medical information systems: a resource for hospitals. Aspen Publishers, Inc.; 1977 Jan 1.
6. Ash JS, Berg M, Coiera E. Some unintended consequences of information technology in health care: the nature of patient care information system-related errors. Journal of the American Medical Informatics Association. 2004 Mar 1;11(2):104-12.
7. Ball MJ. Hospital information systems: perspectives on problems and prospects, 1979 and 2002. International journal of medical informatics. 2003 Mar 31;69(2):83-9.
8. Berg M. Implementing information systems in health care organizations: myths and challenges. International journal of medical informatics. 2001 Dec 31;64(2):143-56.
9. Hard R. Hospitals begin to see benefits of MD access to data. Hospitals. 1992 Feb 5;66(3):48.
10. Littlejohns P, Wyatt JC, Garvican L. Evaluating computerised health information systems: hard lessons still to be learnt. Bmj. 2003 Apr 19;326(7394):860-3.
11. Tonnesen AS, LeMaistre A, Tucker D. Electronic medical Record implementation barriers encountered during implementation. In Proceedings of the AMIA Symposium 1999 (p. 624). American Medical Informatics Association.
12. Wetzel I. Information systems development with anticipation of change focussing on professional bureaucracies. In System Sciences, 2001. Proceedings of the 34th Annual Hawaii International Conference on 2001 Jan 6 (pp. 10-pp). IEEE.
13. Counte MA, Kjerulff KH, Salloway JC, Campbell BC. Implementing computerization in hospitals: A case study of the behavioral and attitudinal impacts of a medical information system. In Use and impact of computers in clinical medicine 1985 (pp. 224-237). Springer New York.
14. Greenhaus JH, Allen TD, Spector PE. Health consequences of work-family conflict: The dark side of the work-family interface. Research in occupational stress and well-being. 2006; 5:61-98.

15. Grzywacz JG, Carlson DS, Shulkin S. Schedule flexibility and stress: Linking formal flexible arrangements and perceived flexibility to employee health. *Community, Work and Family*. 2008 May 1;11(2):199-214.
16. Netemeyer RG, Boles JS, McMurrian R. Development and validation of work–family conflict and family–work conflict scales. *Journal of applied psychology*. 1996 Aug;81(4):400.
17. Cammann C, Fichman M, Jenkins D, Klesh JR. Assessing the attitudes and perceptions of organizational members. *Assessing organizational change: A guide to methods, measures, and practices*. 1983; 71:138.
18. Sagioglu O, Ozturan M. Implementation difficulties of hospital information systems. *Information technology Journal*. 2006;5(5):892-9.
19. Fuß I, Nübling M, Hasselhorn HM, Schwappach D, Rieger MA. Working conditions and Work-Family Conflict in German hospital physicians: psychosocial and organisational predictors and consequences. *BMC Public Health*. 2008 Oct 7;8(1):1.
20. Stock RM, Bauer EM, Bieling GI. How do top executives handle their work and family life? A taxonomy of top executives' work–family balance. *The International Journal of Human Resource Management*. 2014 Jul 20;25(13):1815-40.
21. Hair JF, Anderson RE, Tatham RL, William C. Black (1998), *Multivariate data analysis*.
22. Schumacker RE, Lomax RG. *A beginner's guide to structural equation modeling*. Psychology Press; 2004 Jun 24.
23. Kossek EE. Workplace policies and practices to support work and families: Gaps in implementation and linkages to individual and organizational effectiveness. *Workforce/workplace mismatch*. 2005:97-116.
24. Bragger JD, Rodriguez-Srednicki O, Kutcher EJ, Indovino L, Rosner E. Work-family conflict, work-family culture, and organizational citizenship behavior among teachers. *Journal of Business and psychology*. 2005 Dec 1;20(2):303-24.
25. Anderson SE, Coffey BS, Byerly RT. Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of management*. 2002 Dec 1;28(6):787-810.
26. Kumari L. Employees' Perception on Work Life Balance and It's Relation with Job Satisfaction in Indian Public Sector Banks. *International Journal of Engineering and Management Research*. 2012 Feb;2(2):1-3.
27. Fiksenbaum LM. Supportive work–family environments: implications for work–family conflict and well-being. *The International Journal of Human Resource Management*. 2014 Mar 9;25(5):653-72.
28. Alsaraireh F, Quinn Griffin MT, Ziehm SR, Fitzpatrick JJ. Job satisfaction and turnover intention among Jordanian nurses in psychiatric units. *International journal of mental health nursing*. 2014 Oct 1;23(5):460-7.
29. Leigh J. Modelling suggests authentic leadership from managers influences structural empowerment, job satisfaction and self-rated performance among nurses. *Evidence Based Nursing*. 2013 Jul 19:ebnurs-2013.
30. Mazurek-Melnik B, Hrabie D, Szalacha L. Relationships among work stress, job satisfaction, mental health and healthy lifestyle behaviors in new graduate nurses attending the nurse athlete program. *Honor Society of Nursing, Sigma Theta Tau International*.
31. Wang L, Tao H, Ellenbecker CH, Liu X. Job satisfaction, occupational commitment and intent to stay among Chinese nurses: a cross-sectional questionnaire survey. *Journal of advanced nursing*. 2012 Mar 1;68(3):539-49.
32. Begat I, Ellefsen B, Severinsson E. Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well-being—a Norwegian study. *Journal of Nursing management*. 2005 May 1;13(3):221-30.
33. Ismail A, Jamil AT, Rahman AF, Bakar JM, Saad NM, Saadi H. The implementation of Hospital Information System (HIS) in tertiary hospitals in Malaysia: a qualitative study. *Malaysian Journal of Public Health Medicine*. 2010;10(2):16-24.
34. Ajami S, Mohammadi-Bertiani Z. Training and its impact on hospital information system (HIS) success. *Journal of Information Technology & Software Engin*. 2013 Jan 11;2012.
35. Goldstein IL, Gilliam P. Training system issues in the year 2000. *American Psychologist*. 1990 Feb; 45(2):134.
36. Jayasuriya RO, Southon GR. Information technology management. *Health informatics: an overview*. Churchill Livingstone. ed. China. 1998:291-302.
37. Kossek EE. Workplace policies and practices to support work and families: Gaps in implementation and linkages to individual and organizational effectiveness. *Workforce/workplace mismatch*. 2005:97-116.
38. Bragger JD, Rodriguez-Srednicki O, Kutcher EJ, Indovino L, Rosner E. Work-family conflict, work-family culture, and organizational citizenship behavior among teachers. *Journal of Business and psychology*. 2005 Dec 1;20(2):303-24.

# ANALYZING FARMER'S SATISFACTION REGARDING ALTERNATIVE BANKING SERVICES IN DISTRICT U.S NAGAR OF UTTARAKHAND

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## ABSTRACT

*The study provides a foundation to pursue some meaningful results regarding customer satisfaction in alternative banking services and examined customer satisfaction level comparatively. As per study area concern, almost of banks providing ATM, EFT, NEFT, RTGS, MICR clearing, credit card, debit cards, internet banking and mobile banking. According to information collected by interview of farmers approximately 84 per cent customers were using ATM services, 80 per cent Using KCC (KISAN CREDIT CARD), 38 percent of EFT/NEFT/RTGS facilities, and 100 percent of cheque book holder benefited by MICR services. However, very few customers were using credit card, 20 percent using internet banking and 14 percent using mobile banking services in US Nagar. Most of customers were registered for internet banking and mobile banking service but only 20 percent of registered customers were using those services in practice. The present study indicates that Brand perception is really good in public sector banks and not so in case of private sector banks as customer has great trust and reliability in government organization. ATM, KCC (KISAN CREDIT CARD) facilities give much relief and thus considered as highly satisfied mode according to the customer's requirement in public sector banks. Customer Awareness Perceived usefulness and Security Concern are the major factor which act as driving force in influencing people to adopt alternative banking. Inadequate knowledge about the usage of e-channels, Lack of confidence and Pass word forgotten are the main problems faced by the customers which are considered as main obstacles and thus awareness through extension work is needed with urgent attention to curb this menace. ATM facility and KCC (KISAN CREDIT CARD) facility are highly satisfied the customers requirement and customer prefer public sector banks KISAN CREDIT CARD. The present study indicates that there is significant difference in service quality of alternative banking services provided by public and private sector banks. Customer satisfaction are the most important and focused area in the banking industries. All dimensions of service quality are positively affecting on customer satisfaction. Hence we finalized 13 dimensions of alternative banking services quality as determinants of customer satisfaction that will be further categorized in to four factor. So that in our study four major factor we have identified. When we calculate overall customer satisfaction we need more emphasis on service level, Trust level, usefulness of services and behavior of bank employee.*

## KEYWORDS

farmer's satisfaction, alternative banking services.

## INTRODUCTION

-service to meet its growing customer satisfaction demand during last few years on preference base. Therefore, various amenities under these services has been offered by banks to its wide customer base. Present study in form of survey and monitoring of above mentioned points has been done by choosing selective national and private banks commercial banks in Udham Singh Nagar district. Main objective of this research study is Effect of new ways of delivery services to users is surveyed through these study. ATMs, credit cards, Debit cards, internet banking, mobile banking, core banking, etc. are new ways of delivery channels and therefore widens easiness during operability of these services to the customers.

This research work is carried to find out if gap exists somewhere in service functioning and delivery channels. One of the primary objectives of this research was to gain an understanding of how customers can feel more satisfaction at every stage of operation during use of these alternative banking services and to what extent their problems can be solved through these alternative banking channels which adversely affects customer satisfaction. According to available information it is realized that sent percent of private sector banks and Public sector bank were fully computerized. Today, core banking, ATM, EFT, NEFT, RTGS, MICR clearing, Electronic Clearing Service (ECS), Speed clearing, credit card, debit cards, internet banking and mobile banking are available to survive customer in India. Based on the survey, interviews and observations during the research, we made some recommendations which will focus on how to increase customer satisfaction. In order to enhance the customer satisfaction in alternative banking by offering high quality services we were intended to recommend the bankers and the service designers based on our research experiences. This study reveals that there were a very few number of customers were strongly satisfied. This indicates that there is wider scope to enhance these services through providing better service quality.

## PROBLEM STATEMENT

Udham Singh Nagar is using e -service to meet its growing customer satisfaction demand during last few years on preference base. Therefore, various amenities under these services has been offered by banks to its wide customer base. Proper monitoring for customer satisfaction level and to study their assessment, opinion, and suggestion is put as main agenda for making this bond more strong between customer and banks. Present study in form of survey and monitoring of above mentioned points has been done by choosing selective national and private banks commercial banks in Udham Singh Nagar district. Making good interface with the customer and banks helped a lot in resolving new obstacles and further to smoothen delivery channels of services in a more pacific way. Response of customer is accounted at every step.

Main objective of this research study is to count and analyze growth trajectory e-services and effect of new ways of delivery services to users is surveyed through this study. ATMs, credit cards, Debit cards, internet banking, mobile banking, core banking, etc are new ways of delivery channels and therefore widens easiness during operability of these services to the customers.

## OBJECTIVES OF THE STUDY

1. To study farmer's satisfaction regarding various alternative banking services.
2. To suggest strategies for better utilization of alternative banking services amongst the farmers

## MATERIAL METHODS

### RESEARCH DESIGN

The study strives to accumulate greater insight of Alternative Banking practices followed by public and private sector banks in Udham Singh Nagar District. Therefore, descriptive research design would be adopted as it facilitates the even operations by gathering information from different sources and respondents.

The area of study was confined to Udham Singh Nagar district. District comprises seven blocks namely Jaspur, Kashipur, Bajpur, Gadarpur, Rudrapur, Khatima, and Sitarganj. Out of total seven blocks two blocks Bajpur and Sitarganj was selected. The Sample size 200. However, most of researchers have been used "Likert Type Scaling Technique" to record attitudes of customers. A Likert scale was used for measuring customer satisfaction.

For analysis of data, tabulated in MS Excel and further used in the SPSS software. It would use for descriptive statistics e.g. percentage, mean, average, standard deviation, standard error, reliability analysis (Cronbach's alpha model), factor analysis with the help of Statistical Software SPSS.

## RESULT AND DISCUSSION

### FARMERS SATISFACTION AT SERVICE LEVEL

In order to test of suitability of data for principle component analysis the co relation matrix was computed and enough co relation were found.

#### KMO AND BARTLETT'S TEST

KMO AND BARTLETT'S TEST		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.581
Bartlett's Test of Sphericity	Approx. Chi-Square	411.188
	df	45
	Significant	.000

Further KMO measure of sample adequacy was calculated. The result was not satisfactory if an MSA value below 0.5 which was the min level of acceptance. Overall MSA was found to be 0.581 percent which support that the sample was good enough for factor analysis Chi-Square = 411.188, df = 45 with a significance of 0.000 it provides support for validity of the factor analysis of the data set and indicates that, factor analysis is appropriate.

TABLE 1.1: EIGEN VALUES OF FACTORS

Component	Eigenvalues	% of Variance	Cumulative %	Cronbach's Alpha
Accurate services	2.635	26.350	26.350	0.737
Secured ATMs	1.620	16.199	42.549	
Quick service	1.261	12.607	55.156	
Easy to connectivity	1.077	10.773	65.929	
The website design is attractive	0.912	9.121	75.050	
No error in services	0.724	7.244	82.294	
I have confidence in the bank services	0.630	6.301	88.595	
Personal attention	0.512	5.115	93.710	
Error free internet banking	0.342	3.417	97.127	
The bank quickly solves your problem	0.287	2.873	100.000	

Initial communalities are, estimates of the variance in each variable accounted for by all components or factors. For principal components extraction, this is always equal to 1.0 for correlation analyses. Extraction communalities are, estimates of the variance in each variable accounted for by the components. The communalities labeled as Initial are before extraction communalities and labeled as extraction are after extraction communalities. The all communalities were high (above .400), which indicates that the extracted components represent the variables well.

As shown in Table 1.1 the initial eigen values, that is eigen values before Varimax rotation, for first four factors are above one, indicating these are major factor. Accurate service has emerged as significant accounting 26.35 % of the total variance. four out of ten variables are loaded on this factor of which four are highly correlated. The high positive loading on the first factor of the variable namely accurate services showing that the customer satisfaction in service level. accurate services followed by secured ATM (16.199 % of variance), quick service (12.607 % of variance) and Easy to connectivity (10.773 % of variance). These are the four major variable which are affecting service level factor in customer satisfaction.

### FARMERS SATISFACTION AT TRUST LEVEL

In order to test of suitability of data for principle component analysis the co relation matrix was computed and enough co relation were found.

#### KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.623
Bartlett's Test of Sphericity	Approx. Chi-Square	326.783	
	df	6	
	Significant	.000	

Further KMO measure of sample adequacy was calculated. The result was not satisfactory if an MSA value below 0.5 which was the min level of acceptance. Overall MSA was found to be .623 percent which support that the sample was good enough for factor analysis Chi-Square = 326.783, df = 6 with a significance of 0.000 it provides support for validity of the factor analysis of the data set and indicates that, factor analysis is appropriate.

Initial communalities are, estimates of the variance in each variable accounted for by all components or factors. For principal components extraction, this is always equal to 1.0 for correlation analyses. Extraction communalities are, estimates of the variance in each variable accounted for by the components. The communalities labeled as Initial are before extraction communalities and labeled as extraction are after extraction communalities. The all communalities were high (above .400), which indicates that the extracted components represent the variables well.



TABLE 1.2: EIGEN VALUES OF FACTORS

Component	Initial Eigenvalues			Cronbach's Alpha
	Total	% of Variance	Cumulative %	
Internet banking site keeps customer's best interest in mind	1.397	34.928	34.928	0.821
Internet banking site keeps quick action against problem	1.156	28.896	63.824	
I trust internet banking site	0.911	22.780	86.604	
I trust in internet banking for making decision	0.536	13.396	100.000	

As shown in Table 1.2 the initial eigen values, that is eigen values before Varimax rotation, for first two factors are above one, indicating these are major factor. Internet banking site keeps customers best interest in mind has emerged as significant accounting 34.928 % of the total variance. Two out of four variables are loaded on this factor of which Two are highly correlated. The high positive loading on the first factor of the variable namely Internet banking site keeps customer's best interest in mind showing that the customer satisfaction in trust level. Internet banking site keeps customer's best interest in mind followed by Internet banking site keeps quick action against problem (28.896 % of variance).

#### FARMER'S SATISFACTION AND USEFULNESS OF SERVICES

In order to test of suitability of data for principle component analysis the co relation matrix was computed and enough co relation were found.

KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.598
Bartlett's Test of Sphericity	Approx. Chi-Square	425.862
	df	28
	Significant	.000

Further KMO measure of sample adequacy was calculated. The result was not satisfactory if an MSA value below 0.5 which was the min level of acceptance. Overall MSA was found to be .598 percent which support that the sample was good enough for factor analysis Chi-Square = 425.862, df = 28 with a significance of 0.000 it provides support for validity of the factor analysis of the data set and indicates that, factor analysis is appropriate.

TABLE 1.3: EIGEN VALUES OF FACTORS

Component	Initial Eigenvalues			Cronbach's Alpha
	Total	% of Variance	Cumulative %	
Using electronic commerce would make it easier to do my job	1.890	23.620	23.620	.876
Internet banking is influenced by friend, media and family	1.824	22.803	46.423	
The internet banking improves my performance of banking activities	1.459	18.233	64.657	
KCC (KISAN CREDIT CARD) are useful in my job	1.167	14.591	79.247	
I find out internet banking is clear and understandable	.611	7.632	86.880	
The internet banking makes easier to do my banking activities	.465	5.814	92.694	
Using innovative banking services ought to enhance my effectiveness on the job	.424	5.306	97.999	
Internet banking site useful for my banking account / transaction / connection	.160	2.001	100.000	

Initial communalities are, estimates of the variance in each variable accounted for by all components or factors. For principal components extraction, this is always equal to 1.0 for correlation analyses. Extraction communalities are, estimates of the variance in each variable accounted for by the components. The communalities labeled as Initial are before extraction communalities and labeled as extraction are after extraction communalities. The all communalities were high (above .400), which indicates that the extracted components represent the variables well.

As shown in Table 1.3 the initial eigen values, that is eigen values before Varimax rotation, for first four factors are above one, indicating these are major factor. Using electronic commerce would make it easier to do my job has emerged as significant accounting 23.620 % of the total variance. Four out of eight variable are loaded on this factor of which four are highly correlated. the high positive loading on the first factor of the variable namely Using electronic commerce would make it easier to do my job showing that the customer satisfaction in usefulness Using electronic commerce would make it easier to do my job followed by Internet banking is influenced by friend, media and family (22.803 % of variance), The internet banking improves my performance of banking activities and KCC (KISAN CREDIT CARD) are useful in my job variable are highly correlated with usefulness of services factor.

#### FARMERS SATISFACTION TOWARDS EMPLOYEE BEHAVIOR OF BANK

In order to test of suitability of data for principle component analysis the co relation matrix was computed and enough co relation were found.

KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.505
Bartlett's Test of Sphericity	Approx. Chi-Square	227.487
	df	15
	Significant	.000

Further KMO measure of sample adequacy was calculated. The result was not satisfactory if an MSA value below 0.5 which was the min level of acceptance. Overall MSA was found to be .505 percent which support that the sample was good enough for factor analysis Chi-Square = 227.487, df = 15 with a significance of 0.000 it provides support for validity of the factor analysis of the data set and indicates that, factor analysis is appropriate.

TABLE 1.4: EIGEN VALUES OF FACTORS

Component	Eigen values	% of Variance	Cumulative %	Cronbach's Alpha
Employees of the bank pay special attention to you	1.888	31.472	31.472	.687
Employees of the bank solve your problem	1.498	24.972	56.444	
Employees of the bank solve problem when they promise to do	1.071	17.857	74.301	
Employees of the bank provide fast enough services	.787	13.117	87.419	
Employees of the bank willing to help	.482	8.041	95.459	
Employees of the bank well dress and appearance	.272	4.541	100.000	

Initial communalities are, estimates of the variance in each variable accounted for by all components or factors. For principal components extraction, this is always equal to 1.0 for correlation analyses. Extraction communalities are, estimates of the variance in each variable accounted for by the components. The communalities labeled as Initial are before extraction communalities and labeled as extraction are after extraction communalities. The all communalities were high (above .400), which indicates that the extracted components represent the variables well.

As shown in Table 4.20 the initial eigen values, that is eigen values before Varimax rotation, for first three factors are above one, indicating these are major factor. Employees of the bank pay special attention to you has emerged as significant accounting 31.472 % of the total variance. Three out of six variable are loaded on



this factor of which Three are highly correlated. The high positive loading on the first factor of the variable namely Employees of the bank pay special attention to you showing that the customer satisfaction in employee behavior, Employees of the bank pay special attention to you followed by Employees of the bank solve your problem (24.972 % of variance) and Employees of the bank solve problem when they promise to do (17.857 % of variance) variable are highly correlated with employee Behavior of bank factor.

To study of farmer satisfaction level, we divided farmers satisfaction in to four part namely service level, trust level, usefulness level and behavior of employee. These are the major factors which are affecting overall customer satisfaction. These factors are listed in the table 1.5

TABLE 1.5: MAJOR FACTOR WHICH ARE AFFECTING OVERALL CUSTOMER SATISFACTION

S. No.	Factor	Variable
1	Service level	<ul style="list-style-type: none"> <li>Accurate services</li> <li>Secured ATM</li> <li>Quick service</li> <li>Easy to connectivity</li> </ul>
2	Trust level	<ul style="list-style-type: none"> <li>Internet banking site keeps customer's best interest in mind</li> <li>Internet banking site keeps quick action against problem</li> </ul>
3	Usefulness of services	<ul style="list-style-type: none"> <li>Using electronic commerce would make it easier to do my job</li> <li>Internet banking is influenced by friend, media and family</li> <li>The internet banking improves my performance of banking activities</li> <li>KCC (KISAN CREDIT CARD) are useful in my job</li> </ul>
4	Behavior of Employee	<ul style="list-style-type: none"> <li>Employees of the bank pay special attention to you</li> <li>Employees of the bank solve your problem</li> <li>Employees of the bank solve problem when they promise to do</li> </ul>

## CONCLUSION

In the research work conducting study of farmer satisfaction level, farmer's satisfaction was divided in to four part namely service level, trust level, usefulness level and behavior of employee. These are the major factor which are affecting overall customer satisfaction.

## REFERENCES

1. A. M. Sajane, H. Basavaraja, S. S. Guledgudda, B. L. Patil, S. B. Mahajanshetty and A. R. S. Bhat (2010) *Economic evaluation of kisan credit card scheme*, *Karnataka J. Agric. Sci.*, 24 (2): (173-176) 2011
2. Awara, Nsobiari Festus and Anyadighibe, Joseph Amaechi (2014) Factors Influencing Banks' Implementation and Consumers' Acceptance of E-Banking of Selected Commercial Banks in Calabar, Cross River State, Nigeria, *International Journal of Managerial Studies and Research Volume 2, Issue 9, October 2014*, PP 1-13
3. GIAN JYOTI E-JOURNAL, Volume 1, Issue 2 (Jan – Mar 2012)
4. Monika Kashyap and Dinesh Kumar Sharma (2012) Internet Banking: Boom or Bane
5. Navneet Kaur and Ravi Kiran (2015) E-Banking Service Quality and Customer Loyalty: Changing Dynamics of Public, Private and Foreign Bank Consumers in India, *Global Business and Management Research: An International Journal Vol. 7, No. 1*
6. Navpreet Kaur, Ashutosh Pathak, and Parminder Kaur (2015), Online Banking on E-Commerce in India Int. Journal of Engineering Research and Applications Vol. 5, Issue 4, (Part -6) April 2015, pp.39-49
7. Parasurman and Zinkhan (2002), Marketing to and Serving Customers Through the Internet: An Overview and Research Agenda, *Journal of the Academy of Marketing Science*, Volume 30, No. 4, pages 286-295.
8. Parker and Parker (2008), Electronic Banking in Finland and the Effect on Money Velocity, *Journal of Money, Investment and Banking ISSN 1450-288X Issue 4 (2008)*
9. Pooja Vashishta and Sumiti Kapoor (2012), E-Banking: Perspective for Survival in Current Market. *International Journal of Emerging Trends & Technology in Computer Science* Volume 1, Issue 1, May-June 2012
10. Sanjay Singla and Partap Singh, (2015), An Evaluation of Effectiveness of E-banking in India. *International journal of innovation in engineering and technology*. Vol 5, Issue 2, April
11. Singhal and Padhmanabhan (2008), A Study on Customer Perception Towards Internet Banking: Identifying Major Contributing Factors, *The Journal of Nepalese Business Studies Vol. V No. 1 Dec. 2008*
12. Sufyan Habib (2012) Internet Banking in India Consumer Concerns and Bank Marketing Strategies *Research Journal of Management Sciences* Vol. 1(3), 20-24, October (2012)
13. V. Devadevan (2013), Mobile Banking in India –Issues & Challenges, *International Journal of Emerging Technology and Advanced Engineering*, Volume 3, Issue 6, June 2013
14. Vikas Chauhan and VipinChoudhary (2015), Internet Banking: Challenges and Opportunities in Indian Context *Apeejay - Journal of Management Sciences and Technology 2 (3), June – 2015*

**EMPLOYEES AS HUMAN CAPITAL - A CRITICAL OVERVIEW****DR. S. RAJAMOHAN****PROFESSOR****ALAGAPPA INSTITUTE OF MANAGEMENT****ALAGAPPA UNIVERSITY****KARAIKUDI****LUCAS M****RESEARCH SCHOLAR****ALAGAPPA INSTITUTE OF MANAGEMENT****ALAGAPPA UNIVERSITY****KARAIKUDI****ABSTRACT**

*Human Capital is essential for the success of any organization. Understanding the Human Capital in an organization is a very difficult job to the higher end managers. Every human being is different and they are unique from everyone. God created every human being with equal talents from genesis. As employees, human beings bring unique knowledge, abilities, skills, behaviour and attitude in the form of talents to their employers. This various multilevel diversified skill set bring richness to the business organization. The same richness keeps from trying to understand employees' human capital as a productive asset. In this paper an attempt has been made to explore how to understand employees as Human capital in IT sectors, treating people like assets to create wealth and classification of human capital.*

**KEYWORDS**

knowledge, abilities, skills, attitude, competency, human capital.

**INTRODUCTION**

**I**f you wish to plan for a year, Sow seeds,  
if you wish to plan for Ten years, Plant trees,  
If you wish to plan for a lifetime, Develop MEN [1]

*Chinese adage (Kuan Chung Tzu)*

An organization, cannot make any progress unless it has a well-trained, an efficient, well-motivated and well respected human capital. Human capital (HC) is considered as one of the key element in the organization.

HC is a company's asset. HC means all of the creative skills, and knowledge embodied in. The skills of the employees bring economic value to the business organization. It was first used by several economists in 1950s and 1960s. As Theodore Schultz said "HC should include a value for human potential." It is a people's person which can be used for improvement of production, quality and quantity. "HC is the collective wealth of knowledge, talents, training, skills, judgment and accumulated experiences for a population".

Adam Smith states that "improvements to human capital through training, education, and experience make the individual enterprise more profitable, but also add to the collective wealth of society".

In an organization that supports human capital management (HCM), employees are viewed as assets. The quantifiable value that can be increased using specific management techniques and HCM software tools.

HCM is an approach to employee that perceives people as assets (human capital). The current value can be measured and the future value can be enhanced through investment.

**NEED FOR RESEARCH**

The value of intangible assets within organizations, such as human and intellectual capital, has increased significantly in the recent years. The global economy has become more knowledge intensive. At the same time, a growing body of evidence highlights the relationship between high quality leadership and people management. It is more engaged with resilient staff, and improved business performance. The pace of this development, though, has not been matched by companies' ability and willingness to report on their HCM.

It is surprising that uptake of improved HC reporting standards have been so slow. It is directly linked to the creation of value and there is increased scrutiny on the way organizations are managed and operated. The toxic organizational culture, poor people management and inadequate training are all widely recognized. All these are playing significant roles in numerous corporate failures over the last ten years. In today's competitive global market environment, organization's primary assets are its valuable HC. For successful companies today, management goes beyond capital assets. It involves consistent, long term investments is committed, talented people. Therefore, there has to be a correct understanding of employees as human capital and assets.

**EMPLOYEES AS CAPITAL**

HC describes the value of people at work and their collective knowledge, skills, abilities and capacity to develop and innovate.

Successful Companies always treat people as asset. But many financially oriented industries treat people as costs and overhead expenses. It is like any other expenses that can be reduced or eliminated for short term gain. It is totally a utilitarian view and approach towards people in Business Industries. Most organization goes to great lengths to communicate how they value their people and make every effort to do the right thing by all their employees. However, the ultimate test is in how people are accounted for the financial expenses like salary, headcount, benefit expenses and training expenses.

Today the Management goes beyond the capital assets in understanding employee's capital. It involves looking beyond the business and profit. It involves consistency, long term investment in Relationship Age Leadership and committed talented People. The talent search is very big search in today's world across the Global.

**CONCEPTUAL CLARIFICATION**

**Peter F Ducker's Holistic approach:** To quote from **Christopher Bartlett (2002)**, "The business nature has shifted from a concentration on scarce financial capital to a concentration upon scarce human capital." During the Industrial society it was financial capital and there is no doubt about it. But today things have changed. The strategic capital of today's society is the information and knowledge society. It is the human capital.

It is learnt through the above definition that financial capital is not that important. The future is more of human capital and it is very important for the business. Today's business success depends upon the knowledge workers for the future knowledge economy in the knowledge society. Finally, it is the Human capital which triumphs the entire business.

**Peter F. Drucker (1993)** explains it as follow: 'The most important, and indeed the truly unique, contribution of management in the 20th century was the fifty-fold increase in the productivity of the manual worker in manufacturing. The most important contribution management needs to make in the 21st century is similarly to increase the productivity of knowledge work and the knowledge worker.'

As **Peter F. Drucker (1994)** the god father of modern management has observed, '...an economic order in which knowledge, not labor or raw material or capital, is the key resource.' That is to say HC is the most important assets a modern organization has possessed. Only human beings can make, transfer and exercise knowledge. Today only people can create the holistic values by planting all the other resources as whole. Therefore, HC is the most important assets in a society, the information, and knowledge.

He suggests that the organizations need to understand and appreciate individual characteristics. The Business organizations should treat employees as human beings who contribute to the organization through their talent.

Ducker's writing and consulting challenged Managers and Leaders to empower employees with a sense of accomplishment. The same emphasis is to make their jobs more effective and rewarding. The business leaders and managers need to lead employees not only through knowledge, ability and skills but also through vision, encouragement, responsibility and integrity. He explored the importance of individual HC to organizations and how to build harmonious relationship between individuals and organizations.

"The Practice of Management" Peter F. Drucker observes the resources capable of enlargement can only be human resources" They (all other resources) can be better utilized. Man alone, of all resources available to man, can grow and develop. When speaking of development, it implies that the human being himself determines what he contributes. Thus, the soundness of any organization depends upon its people. Therefore, managing people is very important. 'People' are the subject matter of HCM.

It is learned from the above definition either in business or in social sector also the greatest asset is the human capital. Therefore, it is not the plant, equipment or the magnificent building it owns. It is worth recalling what 'Alfred Marshal' said long ago: "The most valuable of all capital is that invested in human being.". However, it is very unfortunate that balance sheet does not exhibit these most valuable assets, while capital invested in other assets is shown.

### TREATING PEOPLE LIKE ASSET TO CREATE WEALTH

Sometimes the business organizations are focusing more on its customers forgetting its own people (Employees). The people play very critical role in the organization. Organizations are the people and the people are the organization. Therefore, the customer service and the quality depend upon these skilled, motivated people. Employees are the assets in the organization. Levelling with employees is a good practice to encourage them in the workplace.

The organization need to show respect and consideration for employees.

It is, "From capability to profitability, Realizing the values of People Management" the Boston Consulting Group concludes that companies "must regard their Human Capital as an asset worthy of continual investment". Many organizations do not treat their employees properly. It is a good mantra but one that companies finds difficulties due to ownership and self-interest. Moreover, no company can own their employees. The approach should be more reciprocal.

The business organizations should always act in the best interest of the employees. The significant point is that investing in employees co-exists harmoniously with improved financial performance.

Employees are not expense but they are assets. The business cannot be successful without its people. People are necessary to the success of any organization and its business. While most managers implicitly know how valuable their employees are to the success of their business. 'The value of intangible assets within organizations, such as human and intellectual capital, has increased significantly in recent years. This is because the global economy has become more knowledge intensive.'

HC is a sustainable competitive advantage to the organization. It is frequently assumed to contribute to competitive advantage due to its inimitability based on its intangible assets.

It is focusing on people. **A fast-growth business must be able to put the right employees where they are needed, as soon as they are needed.**

HC is the richness that keeps the employees to understand their skills, ability and knowledge as a productive asset in the organization.

### CLASSIFICATION OF HUMAN CAPITAL

There are four methods of understanding Human Capital as Assets. They are Competencies, Experience, Longevity and Attitude.

#### 1. COMPETENCIES

Competencies are a way of thinking about the knowledge behind venue streams and value creation processes. Competencies are also one of the basic ways of understanding the knowledge contained in human capital. When working with companies, try to get the management team to define the competencies needed at the corporate or group level.

This kind of thinking can be pushed down to the level of each employee. The core competencies of an organization are related to its value creation processes. There are also a separate set of competencies related to support services that are specific to the function such as accounting or information technology. These need to be understood but are apart from the core competencies associated with value creation that examine here.

Competencies help to identify what is important in employees' work. They can be described pretty explicitly. They can be measured. They can be used as a basis for hiring and promotion. They are the right starting point for developing a clear picture of employees as a productive asset, as part of our knowledge capital.

#### 2. EXPERIENCE

Another way of understanding the depth of knowledge represented by human capital is experience. Although years of work are not, in itself, a guarantee of a high level of knowledge, it is generally a good starting indicator. Of course, not every company understands this.

Mixing types and levels of experience is a common way of developing balanced teams within an organization. One of the big fears of the aging workforce is that the experience and knowledge of Baby Boomers will be irrevocably lost as they retire. Meeting this challenge will require improved intangibles management that takes the kind of broad view of organizational knowledge.

#### 3. LONGEVITY AND TURNOVER

Longevity and turnover are related to experience as a way of framing human capital. In fact, it is a critical metrics of the strength of a workforce. In today's more mobile world where large amounts of an organization's work may be done outside the normal employee base, these factors are less important. An employee's choice to stay at a company is still a positive thing. But the dynamism of the economy has made it harder for companies and employees to stay in one place. As such, an employee with decades of service to a single company is no longer the norm, nor a requirement for stability and growth. Nevertheless, turnover can be an important factor in the formation of HC. In fact, companies lose knowledge and incur considerable costs to keep a constant stream of new employees coming into the organization.

#### 4. ATTITUDE

A good attitude can make the difference between effective and ineffective employees. In case when there is any doubt, it can cite research that compares the performance of the companies on Fortune's list of the "100 Best Companies to Work for in America." A Edmans showed that the performance of these companies from 1984 to 2005 exceeded that of the overall market by 4%. Don't ignore how employees feel about working in the organization.

It is the knowledge era that the business is heading towards. Employees will always hold key parts of organization's knowledge in their heads. That makes employees more important than ever. The way to deal with this fact is to break down their role in success, understand it, monitor it and make the most of it.

**CONCLUSION**

The policy makers and the Government and the educational institutes need to very seriously evolve a HC metrics as these would improve the HC and links to business performance. The culture of our Indian Business Industries should have a broader outlook towards employees respecting them, recognizing them, above all treating them like human beings.

**REFERENCES**

1. Anna Tavis, Perspectives editor, What Drucker means around the world, vol 32 issue – 4/ 2009.
2. BCG <http://pivotpointsolutions.net>
3. Mary Adams and Michael Oleksak, Putting Knowledge to Work in the 21st Century Organization, 2011.
4. Sharma A.M –Personnel and Human Resource Management, Himalaya Publishing House-1998 p-28.

**WEBSITES**

5. [www.investopedia.com](http://www.investopedia.com)
6. [www.investopedia.com](http://www.investopedia.com)
7. [www.studymode.com](http://www.studymode.com)

# RAIL ROAD CONSTRUCTION AS AN EMPOWERING AND COHESIVE INSTRUMENT IN FRAGMENTED FEDERALISM WITH SPECIAL REFERENCE TO ARUNACHAL PRADESH

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## ABSTRACT

*The paper offers a significant thought on the introduction of Railway in Arunachal Pradesh Bordering China and Bhutan. The Central Idea is the construction of the Rail Road traffic in the High Himalayan terrain for safety security and strategic defense in the Sino- Indian Border to save our country from massive invasion of the opposite side of the Mc Mohan line as the Chinese has made-up massive preparation with a heavy Military build-up with Road and Rail traffic on the opposite side of the Sino Indian Border and can reach to this North Eastern zone of Arunachal Pradesh within a very short span of time with the help of quick communication by Rail and Road connectivity in the Border area and can capture parts of Arunachal Pradesh Corridor in order to reach to the capital port of Yaungon through Burma for their economic and commercial interest and expansion of trade in the South East Asian region which is often reflected in the Chinese policy. On the other hand, this zone of Sino Indian Border is a place where we are seriously lacking Rail connectivity which will be a great hindrance to massive Military movement in this significant strategic location that may cause national disaster and Military blood bath in the unequal battle, much more fatal than the Bomdila fall in 1962. Keeping in view, of the menacing danger we should give are serious thought on this significant national question because the security and safety of the nation is the first and foremost issue for strategic defense, survival of the people of the country and therefore construction of the Railway and massive Rail connectivity in the High Himalayan Zone no matter a gigantic up- hill task but should be given highest priority and to be completed with all Military might and war footing in this significant location which is still a neglected hamlet in the Northeast border. Secondly we also must give a serious thought on the question of 1. Armed forces special power Act 1958. 2. Forest Area Restriction Act. and 3. Tribal Area Restriction Act which are colonial legacies segregating people from the national mainstream and putting hindrance to socio economic development of region by breeding the fatal wounds up extremism, parochialism, anti-national activities and insurgency in the region and weakening the bonds of national federalism which should be done away with as these factors will also be a blockade towards growth and development of the great Indian Railway in this high Himalayan zone. Lastly It can be concluded that the re -generations of the Northeast particularly Arunachal Pradesh depends on the construction of the Railway communication and its ramification in a massive scale which will bring a new socio- economic renaissance in the Northeast as well in Indians Subcontinent and will remove mis -Governance and corruption. Railway connectivity and Rail ramifications in the border zone connecting the towns and villages and hither to desolated hamlets in the region will begin are new chapter of strength and development in the region and strengthen the bonds of federalism and federal structure in the country.*

## KEYWORDS

desolated hamlets, uneven-terrain, grinding halt, replica, strategic location, transcontinental railway.

## INTRODUCTION

Arunachal Pradesh, the gate way of the Northeast is situated in the extreme Northeast of the Indian Sub-continent consisting of 16 district and lies in an important strategic location. It is a state, consisting of tribal people and various races with multi-lingual and multi-racial cultures. The state has a density of population approx 13 people per square Kilometer and is deeply infested with forest, rivers and uneven terrains. The mighty Himalayas with all its ramifications is extended throughout the state cutting across streams, rivers, valleys and deeply infested deciduous forests. Truly speaking, it is a tribal state consisting of different dialects languages, beliefs, manners & customs and thoughts& ideas. It is a state, touching the borders of Tibetan, China and Bhutan in the entire Northeast and western part. Assam and Nagaland are the two neighboring states touching Arunachal Pradesh in the south. River Brahmaputra and its tributaries separated this state into different valleys and regional entities.

The main constraints faced by the state is the lack of communication link and connectivity. Though this Himalayan state has got 336 Km of National Highways but most of the Highways are centered at the southern parts of the territory. Therefore, construction of Railway line in Arunachal Pradesh is the vital need of the hour to link up the entire state.

Since the inception of Railway line and constructions of communication links like roadways and Air Traffic in the Northeastern states from the sixties and seventies onward there was hardly any massive constructions of Railway lines as well as Road links in the state for which this particular state is hidden from the outside world for a long time except a few tourist spots like Itanagar, Zero Tawang and Ato etc and this state bears a neglected entity in the recent days in the Indian map. But keeping in view of the geographical and strategic location bordering the world's most powerful nation the people's Republic of China, Arunachal Pradesh has got significant importance.

It is a fact that construction of Railway of Rail Road traffic in the uneven terrain of the Northeastern state like Arunachal Pradesh is an uphill task and involves heavy amount of expenditure. But keeping in view of the massive buildup of infrastructure and communication link by the Chinese Government on the other side of the Sino-Indian border touching Mac Mohan Line in the eastern segment of Indian Sub-continent who are contemplating a deliberate plan to build up transcontinental Railway through Arunachal Pradesh corridor linking the Port City of Yangon, capital of Myanmar. The Railway Line in this region is no doubt an urgent need of the hour for defending the country and protection and survival of the people of the nation.

## HISTORY OF THE CONSTRUCTION OF RAILWAY IN ASSAM

From the historical point of view, the construction of the Railway started in Assam and its nearby periphery from 1870's where we find that the Britisher build these Railway line in the uneven terrain of Assam connecting different segmented clusters either be in the hilly forest land or in the river valleys with a great deal of efforts by utilizing this manpower particularly prisoners of war and facilitate the communication and transportation route at different isolated areas which were hither to unknown to the people of the world.

These connectivity of rail routes made easier in carriage of goods, freight traffic, movement of consignment and above of people's movement from one place to another and linked-up different tribal districts and regions in a common national hook up. For a long time since than from 1870 onwards, Railway had been the only mode of transport of passengers and freight trafficking in the isolated hamlets of Assam and its nearby states communicating different people of the districts

with the main stream of Indian Sub-continent. It is a fact that the Britishers used these Railway for industrial and commercial exploitation of the huge natural resources like oil and natural gas (In Digboi and Tinsukia Oil Field), lignite coal (Margherita), Huge numbers of wooden materials (teak woods) stones and minerals etc but later on the railway link was found to be a vital sources of Indian Nationalism during freedom struggle. It is a significant fact that the British entrepreneurs and engineers by dint of their excellent engineering and technological skill with accurate survey operation had succeeded in establishing a massive Gigantic infrastructure by laying the first foundation of Railway line in the uneven hilly terrain of Assam covering its hills and valleys which is still existing with some new renovation. The sacrifice and heroic deeds of British Engineers and their associates is a remarkable lesson in the history of Indian railway which is still to be researched and excavated properly. It is a great uphill task which they did with enthusiastic zeal and dedication. The services, rendered by them are still unforgettable. So many British engineers and Indian working force sacrificed their lives and died in Malaria, Diarrhea and in various other unknown diseases and by natural disaster and buried silently in the hills of Assam. Nobody cares for their noble sacrifice rendered to the nation.

Another significant historical fact on record is that the Britishers used their highest engineering skill and technology with war footing in this great Asian nation during the time of construction of Indian Railway challenging the risk of their life to build up this massive construction network in the high Himalayan domains which is stated to be one of the rarest single incident of achievement in the Indian sub-continent in such a high altitude of Himalayan terrain where connectivity with the hills, valleys, gorges, rivers, forest was extremely difficult in absence of modern technology. It is a hidden lesson of history of the brave British engineers and Indian Working Forces. In fact, in the true sense of the term, it was a significant silent revolution in the railway history of communication and extension of rail movement in the northeast. Further, socio-economic resurgence of the country by the rail movement and communication silently and awfully upgraded and uplifted the desolated hamlets of Assam and its peripheral areas into the threshold of national main stream of India which is no doubt a great leap forward in the achievement of Railway movement and communication not only in India but also throughout Asia. It is perhaps the single episode of the history of Rail movement that the Britisher had undertaken on war-footing in building that massive infrastructure due to urgent requirement of natural resources and ramification of industrial needs of England in the colonial countries. But this economic and commercial needs for which the Railway were used by English business houses directly and indirectly helped in connecting people of different regions of colonial territories into a common thread of unity and significantly contributed towards growth and developments of nationalism in the country. During the freedom movement it helped a lot for lodging united struggle against the British Govt. So the Railway in the true sense of the term is a blessing in disguise as with the building and development of Railway infrastructure the unity and the integrity of the country were strengthened on a solid base.

The Assam episode of the colonial Era was a very significant lesson of Railway history and also a lesson towards the development of Northeast including Arunachal Pradesh. But nowhere the example of Assam episode and its significant achievement of Railway movement and communication is reflected in any chapter of history. So, this significant silent revolution of Railway movement and communications was left to die in the hills and no such exposure of its marvelous achievement in the British era was implemented in the northeast and particularly in Arunachal Pradesh either in the policy making process of the Govt. of India or in public and private sector under takings or by any industrial houses. The five years plans after independence though gave emphasis on communication but did not realize the significant importance of Railway infrastructure particularly in the northeast which the Britisher thought and planned hundred years ago and put them into operation.

The history of the northeast would have been different and the condition of Arunachal Pradesh particularly might have taken a different turn if the example of the Assam movement and achievement of Railway would have been repeated in Arunachal Pradesh or any other Northeastern states of India. NEFFA was formed in 1956 now Arunachal was unknown for many a years from the memory of common people's consciousness. The Indian Mandarins and business houses did not give a serious thought on the issue after 1870 and also after the achievement of Indian Independence in 1947 about the importance of building up of Railways in the northeast. NEFFA became a paper tiger throughout the decades. Though, it was upgraded from time to time for political game as the name came to be known as Arunachal as union territory and later on Arunachal Pradesh as a state in 1987 but no socio economic development in the true sense had been implemented either by extension of roadways or Rail traffic for mass communication movement in the region and due to this long apathy and neglect by the authority the overall development of the railways in the northeast came to a grinding halt.

Guwahati –Lumding-Silchar rail line (MG) built in 1870 in the hilly terrain of Assam is the first glaring example of British attempt of building railway line with excellent skill and innovation. This line in the true sense is a replica of national heritage line of the country. With the successful construction of this line barely 146 years ago with 37 great tunnels and many bridges including two heritage bridges namely "Dayang" and "Dhanuk" Bridges still bears a superb example of British engineering skill and marvelous achievement in the history of Indian Railway in Asia. The entire extension of Railway is in fact a great achievement of Railway where hard labor, sincerity of services and supreme sacrifice and above all noble deeds of British engineering skill are reflected. It is perhaps the first Asian Railway line built on such high terrain and thickly forested area and no doubt the entire lay out of the Railway is a national heritage and it should be open to the international world to show that how this tedious task of building the railway in the high Himalayan zones of the northeast have been built for passenger and freight trafficking where there was no technological development of recent days. Even it is a rare occasion in Europe where such massive buildup like Assam Himalayan railways has been attempted at that time.

## RESULTS OF THE CONSTRUCTION OF RAILWAY

With the constructions of Railway in Assam, Railway towns grew up on both sides of Railway stations, socio-economic development got accelerated, travelling and tourism, tea industries became a brisk business in the region and the population started increasing. Apart from these, the carriage of raw materials like oil and natural gas, coal, teak wood and various others forest goods medicinal herbs stated to be transported day after day and the entire state of Assam baring a few tribal hamlets was connected to the national main streams of the country. These factors directly and indirectly contributed towards the growth and developments of national integration.

## OBJECTIVES OF THE STUDY

Among the seven sister states Arunachal Pradesh is the most important not only because of its economical and natural resources but also of its military and strategic location. It is a vast Museum of ethnicity with deep forest having Flora and Fauna which is stated to be unique in the world. But this tribal state remained hidden from the public gaze and attention for a long time because there was no communication link to approach to this place easily. But this state came into lime light in the international scenario in October/ 1962 when massive Chinese aggression in infiltrating in the NEFA Boarder took place. But due to absence of communication link in the region there has been massive setbacks resulting the defeat of the Indian army though they fought vehemently with true patriotic spirit and zeal. This set back was a learning lesson to our strength and weaknesses and we truly realized the important of a viable communication link with other means of transport needed for combating internal disturbances and external aggression.

## WHY RAILWAY IS URGENTLY NEEDED FOR ARUNACHAL AND WHY AMONG THE SEVEN SISTER STATES PREFERENTIAL TREATMENT IS TO BE GIVEN FOR THE CONSTRUCTION OF RAILWAY LINE PARTICULARLY IN ARUNACHAL PRADESH.

It is to be emphasized that Chinese expansion policy in the northeast is a very dangerous move where they have already prepared with massive Railway construction in the high Himalayan zones of Tibet on the opposite side of the Sino Indian Border connecting Lassa and Beijing with high speed Rail and road ways and it is very easy for the Chinese to carry heavy artillery and make military and strategic movement within a very short span of time in the Indian Border Line wherein we are lacking far behind in communication. Secondly, it is also a matter of concern that the land locked zone of southern China is practically looking for a head way of Arunachal Pradesh corridor in order to reach to the port of Yangon through Burma for economic and commercial interest.

Anxious thought to the construction of a railway line had never been given before the seventies in the hilly areas of Himalayas as it involves heavy financial expenditure from national exchequer. Secondly, construction of a railway line in the uneven rugged hilly terrain of the Himalayas is an uphill task. Moreover, treacherous rivers, river valleys and gorges and deep tropical forest and mountainous region constitute a permanent barrier to the construction of railways in the area. Therefore, except Assam the entire Northeast remained alienated from the main stream of Indian life and society since independence. Due to this, the region



is suffering from under development, corruption mis-governance, simmering discontent, illegal migrant settlement from other parts of the country and neighboring nations and tribal discontent (6<sup>th</sup> Scheduled of the constitution did not work well) but the menacing problem that the entire northeast and Arunachal Pradesh is particularly facing is the challenges of insurgencies, terrorism, secessionism and extremism both at the Sino-Indian Border as well as from the neighboring states. This has come into extreme posture in the recent days involving massive deployment of Para-military in the region which awfully takes away the huge chunks of expenditure from the national exchequer for their maintenance. The crisis is deepened day after day and it is a challenge on the part of the Govt. to combat the violence in the northeast.

In order to combat the menacing problem, the Government has taken certain remedial measures like construction of Roadway traffic by border road organization (BRO) Defense organization some local organization and by some NGOs. But these significant efforts contributed by the organization hardly suffice the need of the people. Therefore, a serious thought must have to be given to get a secure environment in the state to combat the menacing task of insurgency and terrorism. Construction of Railway line is a well thought out plan which will serve as a means of mass transport and communication system in the region of Arunachal and this is the only way out to resolve the challenges. The Britishers built the Railway line massively on north Indian plains for quick military movement to quell the rebellion and insurgencies in north India which became later on a significant antidote to revolution. As Railway forms the lifeline of there is no viable alternative to railway for insurgency and extremism. The Britishers brought the Railway in the country for carriage of huge numbers of natural resources through freight traffic and later on passenger's movement. This construction of Railway line had played a great role in the national economy and financial help of the country. This apart in the later years it became a harbinger of national integration in the country. So Railway played a vital role for the unity and integrity of country. National integration would not have been possible if the network of railway was not build up throughout the length and breadth of the country. For example, the Britishers brought the entire Assam under the national main-stream by laying the foundations of national network 140 years ago in the hilly terrain of Assam with great effort by courage and sacrifice involving huge labor and engineering skill during that time which is not yet been done by us. But the Railway Line in Arunachal is the fundamental need of the hour and significantly concerned with the safety and security and survival of the country as Arunachal is the gate way of the northeast and lies at a very strategic important location. Any apathy and lack of concern of this vital issue will directly bring disaster to the country.

### **ARMED FORCES SPECIAL POWER ACT 1958, INNER LINE PERMIT (ILP), HOW IT RELATES WITH THE CONSTRUCTION OF RAILWAY LINE IN ARUNACHAL**

Armed forces enjoy some special power as a public servant in Arunachal Pradesh and other Northeastern states in terms of Armed Forces Special Power Act 1958 which gives them judicial immunity. This is applicable in the disturbed area of Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Jammu & Kashmir. This act separated and segregated the people to come to the national main stream as they cannot come in contact freely with the people of other regions to interact and feel the differences between them and others. Lack of interface contributed towards the segregation and especially tribal of the area are leaving in a secluded place by dint of this Act and therefore they are completely ignorant about the socio-economic development and their rights and privileges. Ignorance and illiteracy in the modern world is another feature of death. Again these tribal peoples are separated by Inner Line Permit (ILP) and forest area restriction Act and many other rules and regulations which awfully which hindered them to get in touch to the main stream of the nation and therefore in order to build the Railway these act especially Arms force special Power act with other acts clash with the construction of the Railways. So it should be adjusted and coordinated or if needed should be done away with for the time being for national interest and for the benefits of the common people of the region. For an example Arms Forces Special Power Act, Tribal Area Restriction Act, Inner Line Permit which are British colonial legacies are still separating the tribal from the national main stream resulting which interaction with people cannot be possible. Similarly, the restricted zones of tribal area cannot be easily reached because of Inner Line Permit and Tribal restrictions. Equally this act is applicable where Armed forces special Power act is pre-dominant. Due to this restriction and compartmentalization interaction with the people cannot be possible, which is very much needed for the survival and socio-economic development of the region at present. Similarly, if the Railway penetrates in the region due to these legal bindings it cannot go unhindered in the restricted zones resulting which the progress of the nation will suffer a lot. Therefore, keeping in view of hurdles and hindrances of the act which restricts with legal bindings these act should be put on hold for the greater interest of the country otherwise the overall development will be a great sad back.

As Railway is needed in the area which is much more greater in demand than these respective acts for the sake of communication, transportation, carriage of heavy goods quick military movement with artillery and arsenal for defense and commercial interest. So these narrow barriers should have to be withdrawn temporarily till life line of the nation is build up in Arunachal for the overall development and security and safety of the nation.

In conclusion it can be said that the progress and resurgence of the nation directly depends upon the resurgence of Arunachal Pradesh. In fact, the socio-economic progress of this state will bring a new renaissance in the country and for this, massive construction of railway and its ramification in the state is of significant importance.

Hence, preferential treatment should have to be given to this gateway Himalayan state other than seven sister states as the strategic location and massive military buildup of China the other side of Sino-Indian Border is a great concern for the safety and security of the whole nation.

There should not be any alternative thought that in the near future rivalry between the two nations will center upon the capture of Arunachal and massive military movement and blood bath will take place which will even by fatal than the disaster of Bomdila 1962 if such precautions are not taken seriously at this stage. Honestly speaking, it is too late but better late than never if we are now conscious with this significant national problem. We have to make this place an impregnable fort as it lies on a vital strategic location of Himalayan zone of Indian sub-continent. The safety and security of the entire nation depends upon the safety and security of Arunachal which is at present is an Achilles hill of the country. Massive Railway construction with the help of armed forces with Indian Railway engineers on war footing in the region is the prime need of the hour by concentrating utilization of national economic resources, instead of scattering it to other sister states as it is the immediate need of the hour for the survival and safety of the nation.

### **CONCLUSION**

The study concludes that the Central Idea is the construction of the Rail Road traffic in the High Himalayan terrain for safety security and strategic defense in the Sino-Indian Border to save our country from massive invasion of the opposite side of the Mc Mohan line as the Chinese has made-up massive preparation with a heavy Military build-up with Road and Rail traffic on the opposite side of the Sino Indian Border and can reach to this North Eastern zone of Arunachal Pradesh within a very short span of time with the help of quick communication by Rail and Road connectivity in the Border area and can capture parts of Arunachal Pradesh Corridor in order to reach to the capital port of Yaungon through Burma for their economic and commercial interest and expansion of trade in the South East Asian region which is often reflected in the Chinese policy. On the other hand, this zone of Sino Indian Border is a place where we are seriously lacking Rail connectivity which will be a great hindrance to massive Military movement in this significant strategic location that may cause national disaster and Military blood bath in the unequal battle, much more fatal than the Bomdila fall in 1962. Keeping in view, of the menacing danger we should give are serious thought on this significant national question because the security and safety of the nation is the first and foremost issue for strategic defense, survival of the people of the country and therefore construction of the Railway and massive Rail connectivity in the High Himalayan Zone no matter a gigantic up-hill task but should be given highest priority and to be completed with all Military might and war footing in this significant location which is still a neglected hamlet in the Northeast border. Secondly we also must give a serious thought on the question of 1. Armed forces special power Act 1958. 2. Forest Area Restriction Act. and 3. Tribal Area Restriction Act which are colonial legacies segregating people from the national mainstream and putting hindrance to socio economic development of region by breeding the fatal wounds up extremism, parochialism, anti-national activities and insurgency in the region and weakening the bonds of national federalism which should be done away with as these factors will also be a blockade towards growth and development of the great Indian Railway in this high Himalayan zone. Lastly It can be concluded that the re-generations of the Northeast particularly Arunachal Pradesh depends on the construction of the Railway communication and its ramification in a massive scale which will bring a new socio-economic renaissance in the Northeast as well in Indians Subcontinent and will remove mis-Governance and corruption. Railway connectivity and Rail ramifications in the border zone connecting the towns and villages and hither to desolated hamlets in the region will begin are new chapter of strength and development in the region and strengthen the bonds of federalism and federal structure in the country.

**REFERENCES**

1. Armed forces special power Act. (1958) in Arunachal and North Eastern states.
2. Desai, A.R -Social background of Indian Nationalism. Chapter: Significance of Railway in bringing nationalism in the country.
3. Dutt, R.P. - India Today, Railway got a great roll in resurgence of Indian nationalism and socio economic consciousness.
4. Dutta, Parul Chandra: - 2010: Latest Research work on Arunachal Pradesh.
5. Jha, Uday Shankar -2013- Comparative Analysis regarding Indian and Chinese Railway.
6. Luthra-Arunachal Pradesh up-graded as a state-Its administrative and constitutional Growth significant outlook has been revealed on the development of Sino-Indian border territory year-1971.
7. Ngaihte-2013- Northeast or Pan North East has become a legitimate term that has to reckon with is a common discourse.
8. Railway property unlawful possession Act. 1966 amended in 2012 and Railway Act. 1989 amended in 2003.

**SERVICE QUALITY GAP BETWEEN PERCEPTIONS AND EXPECTATIONS OF MANAGEMENT STUDENTS****DR. S. P. SINGH****PROFESSOR****FACULTY OF MANAGEMENT STUDIES****GURUKULA KANGRI UNIVERSITY****HARIDWAR****SAVITA MALIK****RESEARCH SCHOLAR (SRF)****FACULTY OF MANAGEMENT STUDIES****GURUKULA KANGRI UNIVERSITY****HARIDWAR****ABSTRACT**

*The objective of the study was to assess the service quality gap between the perceptions and expectations of the management students across business management institutes. The sample for the study consisted of 270 management students from five management institutes of Uttarakhand. The service quality questionnaire has been used on a five-point Likert scale to collect data from the randomly selected 270 management students. Data was analyzed by applying paired sample t-test, mean, percentages and standard deviation. The results of the study show that there is a significant gap in the perception and expectations of management education. Management students are dissatisfied in respect of empathy, reliability, responsiveness, assurance and tangibility.*

**KEYWORDS**

expectations, management students, perceptions, service-quality, student satisfaction.

**INTRODUCTION**

Student satisfaction is an important aspect of higher education institutions and particularly, it is highly related to service quality (Lee & Hwan, 2005). Universities have experienced that higher education has turned into a product and are driven by competition to look at the quality of their services, to measure student satisfaction and to redefine their product in a way familiar to service marketing specialists (Kotler, 1985). Institutions have understood that without providing quality services their long-term continued existence is difficult (Aly and Akpovi, 2001; Kanji et al., 1999). Increasingly organizations are emphasizing on quality services due to its strategic role in improving competitive advantage in the context of attracting students and developing and enhancing a relationship with existing students (Hokanson, 1995).

**LITERATURE REVIEW**

So many researchers conducted studies on student's perceptions and expectations (Ravindran, S.D., & Kalpana M, 2012; Saif, N.I., 2014; Khan, M.M. et al., 2011; Alnaser, A.S. et al., 2014; Alam Malik, S., Hassan, S., & Zahid Iqbal, M., 2012; Borghi, S. et al., 2016; Farahmandian, S. et al., 2013; Rouf, Md. A., et al, 2016). Saif, examined the effect of service quality on student satisfaction by using 490 students of higher diplomas, bachelor's and master's degrees. The study revealed that the effective communication with students is a significant approach to ensure quality in the administration colleges. To increase staff awareness of the importance of quality levels, colleges must apply ongoing comparable programs for all pertinent staff regarding the benefits of implementing quality standards. Khan, analyzed students' perspective of service quality in higher learning institutions by using the SERVQUAL model. The study found a significant relationship between Assurance, Reliability, Empathy and Responsiveness with the student satisfaction while Tangibility was found contains an insignificant relationship with the satisfaction of students. This study also revealed that higher the level of students' satisfaction better was their willingness to put greater efforts towards their studies. Alnaser, evaluated service quality dimensions and satisfaction of students. Results revealed that there are eight critical variables (university facilities, tuition fees, location, information resource, lectures, registration, assurance and curriculum) need further investigation. The service quality dimensions identified a broad picture of the relationship between service quality dimensions and students satisfaction which is supporting higher education institutions to develop suitable approaches aimed to build up their talent to survive with the market challenges and demands. Malik, studied difference between students' perceptions and expectations in business schools and found a significant relationship between implicit service, lecture room facilities and facilitating goods, and overall satisfaction. These variables collectively explained 22.9 percent variation in overall satisfaction. Females were found more satisfied as compared to males in overall satisfaction. Ravindran, evaluated students' expectation, perception and satisfaction towards the management institutions and found that the institution quality factors (location, academics, image, infrastructure, cost and personnel) lead to the overall satisfaction of the respondents. Borghi, evaluated expectations of higher education students, found the difference of thinking among students and professors. While amongst the 32 tested variables, 19 were statistically different and in 13 variables students specified that they anticipate more than the faculty believes them to, with the overall expectations in relation to the course and to the institution. Farahmandian, analyzed perceived service quality and student satisfaction found that the factors of advisory services, facilities, financial assistance, tuition costs and curriculum have a significant and positive impact on the satisfaction of students. Farahmandian, analyzed perceived service quality and student satisfaction found that the factors of advisory services, facilities, financial assistance, tuition costs and curriculum have a significant and positive impact on the satisfaction of students. Rouf, Md. A., et al, (2016) evaluated student satisfaction and service quality provided by universities found a significant relationship between the tangibility, empathy, assurance, responsiveness, reliability and student satisfaction. The majority of the students are satisfied with the facilities provided by universities. Ahmed & Nawaz (2010) evaluated that service quality is a key performance to assess the educational excellence and is a major strategic variable for institutions to create a strong perception in customers' mind. Hasan & Ilias (2008) analyzed that actually students' satisfaction consists of issues and experiences of students through the college years. Parasuraman, et al., (1991) accepted that service quality is one of the important factor of consumer satisfaction.

This study would help the management institutes to provide better service to the students. The students would get satisfactory accurate service when management would attentive towards their services. The study helps to find lacuna in management institution's services and provide suggestions to overcome the problems.

**RESEARCH METHODOLOGY****POPULATION AND SAMPLE**

A sample of 270 management students was randomly selected from the list of 600 management students, of the five selected management institutes.

**MEASURES**

The instrument consisted of 44 items measuring SERVQUAL, i.e. tangibility, reliability, responsiveness, assurance and empathy adapted from Parasuraman, Zeithammal and Berry (1991). The scale employed five point Likert Scale ranging from 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree. The internal reliability of the scale was Chronbach's Alpha  $\alpha=0.925$ .

**ADMINISTRATION**

The instrument was administered to measure the variables of the study on management students of management institutes. A total of 270 questionnaires were distributed out of 250 were recovered, giving a rate of return of 92.59 percent.

**DATA ANALYSIS AND FINDINGS**

For the purpose of analysis, the management institutes were coded as A to E. The demographic profile of the respondents was analyzed through frequency and percentage.

**DEMOGRAPHIC PROFILE OF THE RESPONDENTS****TABLE 1: DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Respondent's profile	Categories	Frequency	Percentage
Gender	Male	122	48.8
	Female	128	51.2
	Total	250	100
Marital Status	Married	12	4.8
	Unmarried	238	95.2
	Total	250	100
Age	Below 20	61	24.4
	20-30	189	75.6
	Total	250	100
Educational Qualification	Graduate	191	76.4
	Postgraduate	59	23.6
	Total	250	100
Work Experience	Below 5	242	96.8
	5-10	8	3.2
	Total	250	100

Results in **table 1** show that the majority of the respondents was females (51.2%), unmarried (95.2%), graduate (76.4%) belonging to the age group of 20-30 with work experience below 5.

Paired sample t-test was performed to predict the significant difference in the means of perceptions and expectations.

**TABLE 2: PAIRED SAMPLES t - TEST**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Tangibility perceptions – Tangibility expectations	-.568	2.886	.183	-.927	-.209	-3.112	249	.002
Pair 2	Reliability perceptions – Reliability expectations	-.828	3.373	.213	-1.248	-.408	-3.881	249	.000
Pair 3	Responsiveness perceptions – Responsiveness expectations	-.480	3.326	.210	-.894	-.066	-2.282	249	.023
Pair 4	Assurance perceptions – Assurance expectations	-.932	3.181	.201	-1.328	-.536	-4.632	249	.000
Pair 5	Empathy perceptions – Empathy expectations	-.680	2.077	.131	-.939	-.421	-5.176	249	.000

The results of the t-test show that there is a significant difference in the means of perceptions and expectations of tangibility ( $t=3.112$ ,  $p<0.05$ ), reliability ( $t=3.881$ ,  $p<0.05$ ), responsiveness ( $t=2.282$ ,  $p<0.05$ ), assurance ( $t=4.632$ ,  $p<0.05$ ), and empathy ( $t=5.176$ ,  $p<0.05$ ).

To find out the service-quality gap, the overall means of the perceptions and expectations for the five service-quality dimensions i.e. tangibility, reliability, responsiveness, assurance were calculated as follows:

**TABLE 3: OVERALL MEANS, STANDARD DEVIATIONS AND GAP IN THE MANAGEMENT INSTITUTES' SERVICE QUALITY**

Dimensions		Perceptions	Expectations	Gap
Tangibility	Mean	14.81	15.38	-0.57
	S.D.	2.717	2.448	
Reliability	Mean	19.20	20.03	-0.83
	S.D.	2.959	3.009	
Responsiveness	Mean	20.34	20.82	-0.48
	S.D.	3.020	2.675	
Assurance	Mean	19.00	19.94	-0.94
	S.D.	3.109	3.027	
Empathy	Mean	11.23	11.91	-0.68
	S.D.	2.038	1.790	

+ indicates satisfaction, - indicates dissatisfaction

Gap= Perceptions-Expectations

Management institutions wise means were calculated to find out the service quality gap for tangibility, reliability, responsiveness, assurance and empathy across all the management institutes included in the study as follows:

**TABLE 4: MANAGEMENT INSTITUTIONS WISE MEANS, STANDARD DEVIATIONS AND GAP ANALYSIS**

Dimensions		A			B			C			D			E		
		P	E	Gap	P	E	Gap	P	E	Gap	P	E	Gap	P	E	Gap
Tangibility	Mean	13.9	18.5	-4.6	15.1	19.5	-4.4	15.5	19.5	-4	14.6	19.4	-4.8	14.9	19.1	-4.2
	S.D.	2.97	2.81		2.57	3.30		2.07	2.52		2.99	3.15		2.70	2.91	
Reliability	Mean	18.2	19.3	-1.1	19.4	20.8	-1.4	19.2	20.8	-1.6	19.5	20.4	-0.9	18.8	20.5	-1.7
	S.D.	3.36	2.90		2.29	3.49		2.74	2.79		2.88	2.97		3.50	3.26	
Responsiveness	Mean	10.8	14.9	-4.1	11.6	15.6	-4	11.2	15.5	-4.3	11.3	15.2	-3.9	11.3	15.7	-4.4
	S.D.	1.83	2.31		1.94	2.62		2.17	2.48		1.86	2.69		2.37	2.07	
Assurance	Mean	18.8	19.2	-0.4	19.3	19.6	-0.3	19.6	20.5	-0.9	19.5	19.6	-0.1	20.0	20.5	-0.5
	S.D.	2.69	2.59		3.40	4.00		2.73	2.79		3.14	3.51		2.76	2.49	
Empathy	Mean	11.2	19.5	-8.3	11.9	19.3	-7.4	12.0	20.6	-8.6	11.9	19.8	-7.9	12.1	20.4	-8.3
	S.D.	3.01	1.71		3.33	1.84		2.82	1.93		3.12	1.68		2.71	1.75	

In **table 4** looking into the institutions-wise means of the service quality dimensions, the mean of the perceptions of the management students for the service quality dimension of tangibility is highest in case of institution C followed by B, E, D and the least in the case of A. The expectations for tangibility are highest for institution B and C with the same mean followed by D, E and least in the case of A. In the case of reliability, the highest mean for perception is of institution D followed by B, C, E and the least being institution A. For the expectations in reliability, the highest mean is of institution B and C both have same mean followed by E, D and least in the case of institution A. For the dimension of responsiveness in case of perceptions institution B have highest mean score followed by D and E with the same mean, then C and A. In the case of expectations for responsiveness, the highest mean is of institution E, then B, C, D and A. For the dimension of assurance, the highest perceptions mean of institution E followed by C, D, B and A. In the case of assurance expectations, the highest mean is of institution C and E with the same mean followed by B and D with the same mean and least in the case of institution A. In the case of empathy the highest mean for perceptions is of institution E, then C, B and D with the same mean followed by A. For the expectations in empathy, the highest mean is of institution C followed by E, D, A and B.

## DISCUSSION

In **table 2** the overall results of the t-test show that the students gave higher importance of empathy ( $t=5.176$ ), assurance ( $t=4.632$ ) and reliability ( $t=3.881$ ), while tangibility ( $t=3.112$ ) and responsiveness ( $t=2.282$ ) were not accorded that much importance respectively. The significant difference between the means of expectations and perceptions implies the dissatisfaction of the management students.

In **table 3** to find out the service-quality gap, the overall means of the perceptions and expectations for the five service-quality dimensions were calculated. It showed that 'responsiveness' had the highest mean in perceptions followed by reliability, assurance, tangibility and empathy. Looking into the means of expectations, 'responsiveness' had the highest mean followed by reliability and assurance. Tangibility and empathy had the least means for expectations. The gap for all the five dimensions were found negative with the highest gap for assurance followed by reliability, empathy, tangibility and responsiveness. The gap analysis of the data reveals that the management students are dissatisfied in all the five dimensions. The level of dissatisfaction is higher in the case of assurance, then reliability, empathy, followed by tangibility and responsiveness.

## CONCLUSION

The results of the study imply that there is a significant gap in the perception and expectations of management education. The management students are dissatisfied in respect of tangibility, reliability, responsiveness, assurance and empathy. Management has to reduce the gap by providing good infrastructure, highly educated faculty and placement opportunities. In all the cases of institutions' management students expect better modern equipment, more number of books in the library, a timely solution of students' problem, experienced faculty, industry visits, relevant course curriculum and placements. The supporting study is Prasad, R.K., & Verma S., (2013) they also found dissatisfaction among the students for service quality providing by their institutes. Further, Rasli A. et al., (2012) also found a significant gap between all five dimensions of SERVQUAL. Therefore, the institutions should focus on the service-quality for increasing the level of management students' satisfaction. The management institutions should conduct management students' survey regularly studying their perceptions and expectations to identify appropriate methods to reduce the service quality gap.

## REFERENCES

1. Ahmed, I., Nawaz, M.M., Ahmad, Z., Ahmad, Z., Shaukat, M.Z., Usman, A. and Ahmed, N., 2010. Does service quality affect students' performance? Evidence from institutes of higher learning. *African journal of business management*, 4(12), p.2527.
2. Alam Malik, S., Hassan, S. and Zahid Iqbal, M., 2012. Measuring students' perceptions and expectations in business schools of Pakistan. *Asian Education and Development Studies*, 1(3), pp.222-236.
3. Alnaser, A.S. and Khalid, M., 2014. SERVICE QUALITY DIMENSIONS AND STUDENTS SATISFACTION. *Journal of Advanced Social Research Vol*, 4(6), pp.01-17.
4. Aly, N. and Akpovi, J., 2001. Total quality management in California public higher education. *Quality Assurance in Education*, 9(3), pp.127-131.
5. Borghi, S., Mainardes, E. and Silva, É., 2016. Expectations of higher education students: a comparison between the perception of student and teachers. *Tertiary Education and Management*, pp.1-18.
6. Cronin Jr, J.J. and Taylor, S.A., 1992. Measuring service quality: a reexamination and extension. *The journal of marketing*, pp.55-68.
7. Farahmandian, S., Minavand, H. and Afshardost, M., 2013. Perceived service quality and student satisfaction in higher education. *IOSR Journal of Business and Management*, 12(4), pp.65-74.
8. Hokanson, S., 1995. "The deeper You analyse, the more you satisfy customers." *Marketing News* 16.
9. Ilias, A.I., Hasan, H.F.A. and Rahman, R.A., 2009. Student Satisfaction and Service Quality: Any Differences in Demographic Factors?. *International Business Research*, 1(4), p.131.
10. Kanji, G.K., Malek, A. and Tambi, B.A., 1999. Total quality management in UK higher education institutions. *Total Quality Management*, 10(1), pp.129-153.
11. Khan, M.M., Ahmed, I. and Nawaz, M.M., 2011. Student's perspective of service quality in higher learning institutions; an evidence based approach. *International Journal of Business and Social Science*, 2(11).
12. Kotler, P. and Fox, K.F., 1985. *Strategic marketing for educational institutions*. Prentice-Hall.
13. Lee, M.C. and Hwan, S., 2005. Relationships among service quality, customer satisfaction and profitability in the Taiwanese banking industry. *International journal of management*, 22(4), p.635.
14. Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1991). Refinement and Reassessment of the SERVQUAL Scale, *Journal of Retailing*, 67 (4). 420-450.
15. Parasuraman, A., Berry, L.L. and Zeithaml, V.A., 1991. Understanding customer expectations of service. *Sloan Management Review*, 32(3), pp.39-48.
16. Prasad, R.K., and Verma, S., (2013). Measuring the satisfaction gap in Management Education: A roadmap for achieving excellence. *Journal of business and management*, ISSN: 2278-487X, Vol. 7, Issue 6, pp. 96-108
17. Ravindran, S.D. and Kalpana, M., 2012. Student's Expectation, Perception and Satisfaction towards the Management Educational Institutions. *Procedia Economics and Finance*, 2, pp.401-410.
18. Rouf, A., Rahman, M. and Uddin, M., 2016. Students' Satisfaction and Service Quality of HEIs. *International Journal of Academic Research in Business and Social Sciences*, 6(5), pp.376-390.
19. Saif, N.I., 2014. The Effect of Service Quality on Student Satisfaction: A Field Study for Health Services Administration Students. *International Journal of Humanities and Social Science*, 4(8), pp.172-181.

## IMPACT OF IFRS ON REVENUE RECOGNITION: A CASE OF INDIA

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## ABSTRACT

*The globalization has brought a lot of changes in doing business across the world. Multinational companies are extending and establishing their business in various countries with emerging economies. The companies are entering into foreign markets to fulfill their capital needs by getting their securities listed on the stock exchanges outside the country. The use of different accounting frameworks in different countries creates confusion for users of financial statements resulting into inefficiency in capital markets across the world. The increasing complexity of business transactions and globalization of capital markets call the regulators, multinational companies, auditing firm and investors to see the need for common standards in all areas of financial reporting to ensure integrity of different country's business together in the world market. Thus, the case for a single set of globally accepted accounting standards has prompted many countries to pursue convergence of national accounting standards with IFRS. More than 100 countries have converged or recognized the police of convergence with the IFRS. An upcoming economy on world economic map, India, too, decided to converge to International Financial Reporting Standards (IFRS). Revenue is one of the most important items in financial statements and that revenue recognition is one of the most difficult issues that standard-setters and accountants have to deal with. The paper examines the impact and implications of revenue recognition on financial reporting in different sectors. And also the difference between IFRS and AS on revenue recognition is highlighted.*

## KEYWORDS

Indian accounting standards (IAS), fair value, international financial reporting standards (IFRS), revenue recognition.

## INTRODUCTION

A lot of change has taken place in doing business across world due to globalization. Multinational companies are extending and establishing their business in various countries with emerging economies. The companies are entering into foreign markets to fulfill their capital needs by getting their securities listed on the stock exchanges outside the country. The use of different accounting frameworks in different countries creates confusion for users of financial statements resulting into inefficiency in capital markets across the world.

These different circumstances have led to the use of a variety of definitions of the elements of financial statements: for example, assets, liabilities, equity, income and expenses. They have also resulted in the use of different criteria for the recognition of items in the financial statements and in a preference for different bases of measurement. The scopes of the financial statements and the disclosures made in them have also been affected.

However, the diversity of accounting standards among the nations of the world has been a problem for the globalization of the business environment. In India, the Accounting Standards Board (ASB) was constituted by the Institute of Chartered Accountants of India (ICAI) on 21st April 1977, which performs the function of formulating accounting standards. Generally, accepted accounting principles (GAAP) are diverse in nature but based on a few basic principles as advocated by all GAAP rules. These principles include consistency, relevance, reliability and comparability. Generally Accepted Accounting Principles (GAAP) ensures that all companies are on a level playing field and that the information they present is consistent, relevant, reliable and comparable. Thus, these moves by India will help in harmonizing its accounting standards with the internationally accepted accounting standards, which will lead to a globally accepted accounting system for the companies in India.

## BENEFITS OF IFRS

## 1. BETTER ACCESS TO GLOBAL CAPITAL MARKETS

To meet the regulatory requirements of these markets, Indian Companies should report their financials as per IFRS. Thus adoption of IFRS not only helps Indian Firms in accessing global Capital Markets for funds but also accessibility of funds at cheaper cost.

## 2. EASIER GLOBAL COMPARABILITY

Firms are using IFRS to report their financial results. The comparison of the two firms have become easier with the adoption of IFRS by Indian Firms. Stakeholders including Investors, Bankers and Lenders also find it easy to compare the two financial statements following same reporting procedure. Indian companies in the process of raising funds from overseas capital markets have to provide financial results to interested parties. Since majority of Indian Firms are accessing European capital markets, preparation and presentation of financial statements on the basis of IFRS helps firms in getting easy accessibility to these capital markets.

## 3. EASY CROSS BORDER LISTING

Funds are required by the Indian Firms for their expansion plans which are not limited to the economic and political boundaries of India. Indian Firms are acquiring firms outside India also. They are also getting listed in European and American Capital Markets through raising funds from these markets. One of the major pre-requisites of getting listed on European Markets is preparation of Accounts as per IFRS requirements. Some Indian companies have started preparing their financial statements as per IFRS especially which have raised funds through the European Capital Markets.

## 4. BETTER QUALITY OF FINANCIAL REPORTING

The quality of financial reporting is expected to increase due to consistent application of Accounting Principles and improvement in reliability of financial statements. Among various latest trends-based concepts, IFRS follows a concept of fair value which can help Indian firms to reflect their true worth of Assets held in the financial statements.

## 5. ELIMINATION OF MULTIPLE REPORTING

The Adoption of IFRS has eliminated the problem of multiple financial reporting standards by these firms

In spite of these benefits, adoption of IFRS in India is not that easy and faces many challenges. Adoption of IFRS means a complete set of different reporting standards have to bring in. The awareness of these reporting standards should be created among the stakeholders like Firms, Banks, Stock Exchanges, and Commodity Exchanges etc. Professional Accountants are looked upon to ensure successful implementation of IFRS. It has been observed that India does not have enough number of fully trained professionals to carry out this task of adoption of IFRS in India.



**LITERATURE REVIEW**

Anderson and Yohn (2002) concluded through their research that more than any other issue, investors are more concerned about revenue recognition at the time of problems in a company's financial statement.

T Colwyn Jones and Robert Luther (2005) examined the possible impact on manufacturing companies drawing upon perceptions and expectations of managers in three Bavarian companies and two management consultancy firms and found out that, at this juncture in the development of their information systems, German managers face an important choice between integrating external and internal reporting in ways that might fundamentally change established Controlling practices, or of continuing to operate dual accounting systems in much the same way as in the past so that adoption of IFRS is restricted to external reporting.

Daske et al. (2008) examined the impact of mandatory IFRS adoption on cost of capital around the world, including EU countries and stated that first time mandatory adopters experience a modest decrease in the cost of capital. They observed that the capital market benefits of IFRS adoption are most pronounced for countries with strict enforcement regimes. Their effects are stronger for countries where local GAAP differs more from IFRS.

Karthik Ramanna and Ewa Sletten (2009) while studying the need for adopting IFRS taking 102 non-European Union Countries found out that a country is more likely to adopt IFRS if its trade partners or countries within its geographical region are IFRS adopters. Also, more powerful countries are less likely to adopt IFRS, consistent with more powerful countries being less willing to surrender standard-setting authority to an international body.

Md Humayun, Fawzi and Md Ainul (2010) examined the impact of the adoption of International Financial Reporting Standards (IFRS) on the accounts and the quality of earnings of New Zealand firms. Their analysis of IFRS adjustments revealed that total assets, total liabilities and net profit were significantly higher under IFRS than under pre-IFRS GAAP. Profit and equity under IFRS were increased by adjustments for goodwill and other intangibles and investment property, and decreased by adjustments for employee benefits and share-based payments.

Cai, Francis and Hannal (2010) found out that capital markets of the countries that have adopted IFRS have high degree of integration among them after their IFRS adoption as compared to the period before the adoption.

Most of the previous studies on IFRS in India have addressed the issues related to the problems and challenges in the implementation of IFRS.

Kaushik datta (2009), Pawan Jain (2011), Srivastava, Anubha; Bhutani, Prerna, (2012) Mahender k. Sharma (2013), Gurpreet kaur and Amit kumar (2014), Meenu Sambaru and Dr. N. V. Kavitha (2014), Dr. Preeti shrivastava, D.S Rawat and Deepti Maheswari (2015). Have analyzed the information available on IFRS adoption process and the problems faced by the stakeholders (Regulators, Accountants, Firms etc.) in the process of adoption of IFRS in India and suggested that an effective Control & Enforcement Mechanism are required in order to ensure a high quality corporate financial reporting environment and creating an awareness is mandatory for successful implementation of IFRS in India.

Rakesh and Shilpa R (2013) found out that there is a significant relationship between IFRS adoption by companies and FDI in India and the adoption of standard accounting format will increase the level of confidence of global investors and investment analysts in the financial statements of companies in India. IFRS is an effective tool for enhancing the uniformity and comparability of financial statements of companies which have adopted it in India.

Besides, few research has been done on the impact of IFRS in the banking sector and not much has been done on revenue recognition. Azira Abdul Aziz (2012), examined the impact of IFRS on banking industry and stated that IFRS adoption leads to a reduction in income smoothing activities through loan loss provisions for IFRS adopters.

Firoz and Abdul Aziz Ansari (2011) critically analyzed the financial statements of the Indian Banking Industry and found out that implementation of IFRS has a great effect over advances, financial instruments and investments and banking industry needs more detailed analysis and valuation of existing advances and all other instruments in order to comply with IFRS.

Sankar Thappa (2012) studied the various phases of implementation of IFRS in India and suggested that challenges in the implementation of IFRS can be addressed by creating awareness on importance of compliance with accounting and auditing standards and by giving training to the staff.

**OBJECTIVES OF THE STUDY**

Revenue is one of the most important items in financial statements and that revenue recognition is one of the most difficult issues that standard-setters and accountants have to deal with. Following are the objectives of the study:

1. To highlight the difference between IFRS and AS on revenue recognition.
2. To examine the impact and implications of revenue recognition on financial reporting in different sectors.

**DIFFERENCE BETWEEN AS9 AND IFRS 15**

Revenue means gross inflow of cash, receivables or other consideration arising in the course of ordinary activities of an enterprise such as

- The sale of goods
- Rendering of the services
- Use of the enterprises resources by others yielding interest

Revenue manipulation is one of the most common ways of creative accounting. Enron and satyam are one of the recent examples. So the IFRS 15 on revenue recognition deals with when revenue should be recognize. However, the key difference between IFRS 15 and AS 9 are as follows:

- IFRS 15 Revenue from Contracts with Customers is a comprehensive standard that deals with revenue recognition. It has replaced AS 9 Revenue Recognition and AS 7 Construction Contracts.
- A five-step model with a single principle for recognizing revenue has been introduced that applies to all contracts under IFRS15.

This core principle is described in a five-step model framework:

Step 1: Identify the contract(s) with the customer

Step 2: Identify the separate performance obligations in the contract

Step 3: Determine the transaction price

Step 4: Allocate the transaction price to separate performance obligations

Step 5: Recognize revenue when (or as) each performance obligation is satisfied

1. Under AS 9 different recognition and measurement criteria for varying streams of revenue has been specified whereas under IFRS 15 Revenue Recognition requires revenue to be measured at the amount of consideration to which an entity expects to be entitled (rather than contractually specified) in exchange for transferring the promised goods or services.
2. The concept of variable consideration is introduced in IFRS 15. It takes various forms, including (but not limited to) volume discounts, price concessions, rebates, refunds, credits, incentives, performance bonuses and royalties. An entity's past business practices can cause consideration to be variable if there is a history of providing discounts or concessions after goods are sold whereas no guidance was there in AS 9 regarding this.
3. IFRS 15 requires that revenue should be recognized over time by measuring progress towards completion for recognizing revenue from service transactions. While an option was provided in AS 9 to use either the proportionate completion method or the completed service contract method for specified transactions

**IMPACT ON AN ORGANISATION AND ON FINANCIAL REPORTING**

IFRS 15's core principle is that an entity will recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This will require entities to use more judgment and make more estimates than under current Indian GAAP. Unlike Indian GAAP, IFRS15 provides detailed guidance on the identification of separate performance obligations of a single transaction. It will be essential to apply the recognition criteria to the separate performance obligations of every transaction to reflect the substance of the transaction. Therefore, marketing strategies, such as free maintenance services for cars, loyalty points by hotels and supermarkets and free handsets by telecom operators,

would need to be carefully evaluated to gauge their impact on revenue recognition. IFRS15 requires stand-alone selling prices to be determined for all of the identified performance obligations. Companies that do not currently estimate stand-alone selling prices will need to involve personnel beyond those in the accounting or finance departments. Personnel responsible for an entity's revenue recognition policies may need to consult with operating personnel involved in pricing decisions to determine estimated stand-alone selling prices, especially when there are limited or no observable input.

#### **Contracts containing Multiple elements**

Earlier in AS 9, revenue is measured by the charge made to customers or clients for goods supplied and services rendered and by the charges and rewards arising from the use of resources by them. But it sometimes becomes difficult to determine revenue for a contract that contains multiple elements such as sale of goods and rendering of services. IFRS 15 has come up with the fair value concept which states that the transaction price in such activities must be allocated to each separate performance obligation, so that revenue is recorded at the right time and in the right amount. Under Indian GAAP, an EAC opinion deals with accounting in the case of multiple element contracts in a limited way.

#### **Control model**

Control model in IFRS 15 has been introduced to determine the point of revenue recognition. Management has to determine, at contract inception, whether control of a good or service transfers to a customer over time or at a point in time or not. Arrangements where the performance obligations are satisfied over time are not limited to services arrangements. Complex assets or certain customized goods constructed for a customer, such as a complex refinery or specialized machinery, could also be transferred over time, depending on the terms of the arrangement. Revenue is said to be recognized over time if any of the following three criteria are satisfied:

- The customer all the while gets and devours the advantages provided by the substance's execution as the entity performs
- The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced...
- The entity's performance does not create an asset with an alternative use to the entity...and the entity has an enforceable right to payment for performance completed to date

This model is very useful for the companies engaged in the business of construction or real estate.

- *Reduction in the volatility of revenue recognition*

IFRS 15 requires revenue to be recognized over time by measuring progress toward completion. However, the entities whose revenue and deferred revenue is based on the completed service contract under AS 9 will have a significant impact on their income statement. The volatility of the income statement of such entities will be streamlined by the application of IFRS 15, and the profit or loss for the period will better represent the efforts put in by the entities during the period.

### **IMPLICATIONS OF IFRS IN DIFFERENT SECTORS**

The adoption of IFRS 15 will have a significant impact on different sectors in some way or the other while recognizing revenue. Some of the impact of revenue recognition in different sectors has been discussed below:

#### **• TELECOMMUNICATION SECTOR**

All indirect taxes ("gross inflow") form part of the revenue under as per IAS-9 whereas these taxes (being 'pass through receipts') will not form part of revenue under IFRS 15. In case of an operator if total revenue collected is Rs. 100 million which includes service tax of Rs. 10 million and trade discount and rebates of Rs. 1 million then for the purpose of IFRS 15 the fair value of revenue is Rs. 89 million. In AS-9 it would have been the total amount i.e 100 million. In this case, revenue recognition will decrease significantly because of the adoption of IFRS. There would be an adverse impact on profit, net worth, EPS, and enterprise value, inter alia, since this would be a permanent change. However, extent of impact will differ from case to case basis.

There is no requirement of any adjustment of discounting to revenue items under AS 9 whereas IFRS 15 requires adjustment of discounting if cash flows are deferred. Both the methods- completed service method and proportionate completion method can be used as a recognition criteria under AS 9 while under IFRS 15, percentage completion method is compulsory.

Even the customer activation fees will now be accounted for amortization over the expected duration of the customer relationship'. The telecom operators provide both hardware and software products or combination of any two or more than two. E.g.: mobile handsets along with (bundled) services, set up boxes, internet connections etc. IFRS 15 requires that fair value of each component should be determined for the purpose of revenue recognition. However, determining fair value of each component requires complex estimates. One may have to refer to prices of individual component on standalone basis adjusted for volume discounts. For this purpose, to arrive at the value of each component separately, it should have a standalone value to customer and its fair value should be determinable.

#### **• AIRLINES**

The aircrafts are normally acquired by long-term lease arrangements. Due to differential pricing adopted by airlines the velocity with which revenue comes differ from time to time. Under IAS 18/IFRS 15, Airlines entities have to identify contract with the customer, identify the separate performance obligations, ascertain the transaction price and allocate the transactions price to separate performance obligations and then recognize the revenue of the performance. Changes in the air tickets, cancellation of air tickets, defer their travel or change their route causes the separate charges for each contract have a significant change in the revenue.

#### **• AUTOMOTIVE**

The automotive industry is a capital sensitive industry having a long supply chain. Huge cost is incurred on research and development to keep bringing out new models of vehicles and their agreement with suppliers are even complicated. In automotive industry, Revenue would be recognized when the vehicle is handed over to the customer because with the physical delivery the risk and regards is also transferred. While determine the revenue, the manufacturer should look into the terms of the contract carefully.

#### **• FAST MOVING CONSUMER GOODS**

The word fast moving consumer goods are those products that are sold quickly and at relatively low cost. They are manufactured, traded and they are goods with short shelf lives. Revenues are realized quickly but also led to pile up of inventories or losses. A lot of careful consideration and judgment is involved while recognizing revenue. Like, new product launches, product returns rebates and discounts, sales incentive, and taxes levied.

### **CONCLUSION**

The adoption of IFRS not only helps Indian Firms in accessing global Capital Markets for funds but also accessibility of funds at cheaper cost and has made the comparison of the two firms easier. Moreover, IFRS follows a concept of fair value which can help Indian firms to reflect their true worth of Assets held in the financial statements. The above discussion shows that revenue recognition is one of the most common ways of creative accounting and therefore revenue should be recognized carefully. IFRS15 provides detailed guidance on the identification of separate performance obligations of a single transaction. It will be essential to apply the recognition criteria to the separate performance obligations of every transaction to reflect the substance of the transaction. A five-step model with a single principle for recognizing revenue has been introduced that applies to all contracts under IFRS 15. The implementation of IFRS have the major impact on the revenue of the firms. However, the extent differs from sector to sector and from time to time.

### **REFERENCES**

1. Abdul Adzis, A. (2012). The impact of international financial reporting standards (IFRS) on bank loan loss provisioning behaviour and bank earnings volatility: a thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Banking Studies at Massey University, Manawatu Campus, New Zealand (Doctoral dissertation).
2. Anderson, K. L., & Yohn, T. L. (2002). The effect of 10K restatements on firm value, information asymmetries, and investors' reliance on earnings. Information Asymmetries, and Investors' Reliance on Earnings (September 2002).

3. Cai, F., & Wong, H. (2010). The effect of IFRS adoption on global market integration. *International Business & Economics Research Journal (IBER)*, 9(10).
4. Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of accounting research*, 46(5), 1085-1142.
5. Firoz, C. M., Ansari, A. A., & Akhtar, K. (2011). IFRS-Impact on Indian Banking Industry. *International Journal of Business and Management*, 6(3), 277.
6. Gurpreet, K., & Amit, K. (2014). IFRS and India: Problems and Challenges. *Research Directions Journal*, 1(7), 1-5.
7. Jain, P. (2011). IFRS implementation in India: Opportunities and challenges. *World Journal of Social Sciences*, 1(1), 125-136.
8. Jamil, K., & Akeel, M. (2009). Convergence with International Financial Reporting Standards (IFRS): Impact on Fundamental Accounting practices and Regulatory Framework in India. *Bombay chartered Accountants Journal*, 71-75.
9. Jones, T. C., & Luther, R. (2005). Anticipating the impact of IFRS on the management of German manufacturing companies: some observations from a British perspective. *Accounting in Europe*, 2(1), 165-193.
10. Kabir, M. H., Laswad, F., & Islam, M. A. (2010). Impact of IFRS in New Zealand on accounts and earnings quality. *Australian Accounting Review*, 20(4), 343-357.
11. Kaushik datta, (2009) "similarities and differences a comparison of IFRS, US GAAP and India GAAP"
12. Rakesh, H. M., & Shilpa, R. (2013). Effect of IFRS and Financial Statements: Implications on FDI and Indian Economy. *International Journal of Commerce, Business and Management (IJCMB)*, 2(5), 233-241
13. Ramanna, K., & Sletten, E. (2009). Why do countries adopt international financial reporting standards?. *Harvard Business School Accounting & Management Unit Working Paper*, (09-102).
14. Rawat, D. S., & Maheswari, D. A Study on Challenges and Prospects of IFRS in Indian Accounting System.
15. Sambaru, M., & Kavitha, N. V. (2014). A Study on IFRS in India. *International Journal of Innovative Research and Development* | ISSN 2278-0211, 3(12).
16. Sharma, M. K., & Vaja Jignesh, R. (2013). IFRS & India—its problems and challenges. *International Multidisciplinary Journal of Applied Research*, 1(4).
17. Srivastava, A., & Bhutani, P. (2012). IFRS in India: Challenges and opportunities. *IUP Journal of Accounting Research & Audit Practices*, 11(2), 6.
18. Thappa, S. (2012). IFRS S in Indian Banking Industry: Challenges Ahead. *International Journal of Finance and Accounting*, 1(5), 94-105.

# A STUDY ON CONSUMER BEHAVIOUR TOWARDS ORGANIZED RETAILING WITH A SPECIAL REFERENCE TO BELAGAVI CITY

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## ABSTRACT

*The retail sector has been at the helm of India's growth story. The sector has evolved dramatically from traditional village fairs, street hawkers to resplendent malls and plush outlets, growing from strength to strength. Today's consumer doesn't want to waste their time purchasing fruits and vegetables, in sabji bazaar, kirana stores etc. Rather they want to reduce the risk and time by purchasing all items under a single roof. In this paper, we aim to study the consumer behaviour towards organized retailing. A sample 100 respondents was selected by using Stratified Random Sampling method and the data was collected with the help of structured questionnaire. The study reveals that consumer is moving towards organised retailing, due to various services provided by retailer and also the level of customer satisfaction towards organised retail outlets in Belagavi city.*

## KEYWORDS

behaviour, organised retail, consumer satisfaction.

## INTRODUCTION

Retailing is not only an important of the economic structure but very much a part of our lives. Although trading of goods has been in existence since the time immemorial, it is only in the recent past that the buying and selling of goods have become more of a formal and a brand dominated activity. In fact, today retailing is evolving into a global, and lucrative business. Nevertheless, the traditional forms of independently owned small business co-exist along with the organised retailers like department stores, speciality stores, shopping complexes, malls, large scale multiple chains.

Retailing is broadly divided into two categories, unorganised and organised. According to the national accounts statistics of India "The unorganised sector includes units whose occupation is not regulated by any statute or legal provision, and/or those, which do not maintain regular accounts". Unorganised retailing is also known as traditional form of low cost retailing. These includes the neighbourhood local baniya, general stores, the local kirana shops, provision stores, local markets and hand cart, pavement vendors, fruit vendors, vegetable vendors, mom and Pop stores, weakly haats and bazaar, sabjmandi, general readymade garment shop, footwear shop, tailoring, shoe repairing, paanvala etc. On the other hand, organised retailing denotes to trading activities undertaken by licensed retailers, i.e those who are registered for sales tax, income tax etc. These retailers comprise the corporate-supported retail chains and hyper markets, departmental stores, discount stores, drug stores, factory outlets and large retail businesses.

## REVIEW OF LITERATURE

**Nagaratna Venkatesh (2013)**, in his paper has mentioned overall forecast from different researches have stated that retail growth will grow 15 to 20 percent over the next five years, based on strong fundamentals of macroeconomic conditions of India and its younger population rising disposable incomes and rapid urbanization. Key success factor for foreign retail investors are the younger population of India's who are under the age of 25, a huge potential market is waiting to explore and the internet accessibility is also a key factor where from rural to urban city everyone has the easy access to the internet. As many as 121 million Indians have internet access, and more than half of them access the web via their mobile phones.

**Sanjay Manocha and Anoop Pandey (2012)** has discussed modern retailing is not threat to independent mom and pop stores as most of the consumers said that they never stopped visiting Kirana store. Organized retailing is beneficial for India because it's not alarming to create conflict with unorganized stores but reshaping unorganized stores into nascent organized stores. The author has also discussed the growth of modern retailing in India which is not at a very fast pace.

According to **Ms. Monika Talreja and Dr.Dhiraj Jain (2013)** both modern and traditional retailers will co-exist in India for some time to come, as both of them have their own competitive advantages. The kirana stores have a low – cost structure, location advantage and customer formality whereas organized retail offers a mixture of product width and depth and a better shopping experience. Organized retailing is becoming a destination shop for buying fresh fruit vegetable.

**M. Hameedunissa (2013)** in his paper consumer psychology towards supermarkets has focused how people's thoughts, beliefs and perception influence consumer behaviour. The role of consumers psychology has been discussed in this paper that how it affects a consumer towards buying from any outlet. **Indian retail market opening more doors (Deloitte report)** organized retail, which constitutes 8 per cent of the total retail market, will grow much faster than traditional retail. It is expected to gain a higher share in the growing pie of the retail market in India. Various estimates put the share of organized retail as 20 per cent by 2020.

According to **R.K. Srivastava (2013)** retail in India and retail in South Africa has been compared in the study. The finding suggests that branding of the retail store is actively followed in South Africa but in India retailers perceives it as a part of business. Security system on purchase & prevention of theft is good in South Africa than Indian system and it has to be developed as a prime concern. The segmentation strategy for both the countries retailers are somewhat matching which are on the basis of income and age.

**Anuja Shukla, Ankur Shukla (2013)** the authors have focused on shifting preference of customer from traditional retail to emerging new retail formats. Value of customer to be treated as a king can be seen today because of the competition. The shopping experience of increasing due to increase in the share of organized retailing.

## STATEMENT OF THE PROBLEM

Consumers are complex individuals, subject to a variety of physiological and social needs and priorities of different consumers segments diagrammatically. To design products and marketing strategies that fulfil consumer's needs, marketing must study consumer's consumption behaviour in-depth. The term consumer research referred to the process and tools used to study consumers behaviours. Consumer's research is a form of market research, a process that links the consumers and public to the marketer through information in order to identify marketing opportunities and problems, evaluate marketing actions and judge the

performance of a marketing strategies. The market research process attains the information require, designs the method for collecting information, manages the data collection process, analogous the results and communicate the findings to marketers.

### OBJECTIVES OF THE STUDY

1. To study the influence of demographic factors on the consumer preferences towards the selection of retail outlets.
2. To find out the consumers preference as well as the factors influencing the buying behaviours towards organized retailing.
3. To study the consumer satisfaction level towards organized retailing

### METHODOLOGY

This study is descriptive in nature. The data used in this study is primary data, obtained through a survey conducted to analyse the behaviour of respondents. The stratified random sampling method was used to collect the data. The survey was conducted on the randomly selected 100 respondents from Belagavi City. A structured questioner was designed to meet the objective of the studies.

A standard questionnaire is prepared for the collection of data from those respondents who visit the organised store. The questionnaire was designed in such a way that the aim of collecting essential information for the study would meet the set of objectives.

### TOOLS FOR ANALYSIS

For data analysis, percentage analysis simple charting and tabulation tools are used to understand the behaviour of the respondents towards organized retailing.

**TABLE 1: DEMOGRAPHIC PROFILE OF SAMPLE RESPONDENTS**

Demographic Factors		Frequency
Gender	Male	45
	Female	55
Total		100
Age group	Less than 2 yr	17
	20-30 yr	42
	30-40 yr	27
	40-50 yr	11
	Above 50 yr	3
Total		100
Marital Status	Single	53
	Married	47
Total		100
Educational Qualification	12 <sup>th</sup>	20
	Graduate	35
	Post Graduate	31
	Professional	14
Total		100
Occupation	Student	30
	Private Employee	25
	Government Employee	12
	Business	17
	Housewife	16
Total		100
Family Structure	Nuclear	35
	Joint	64
Total		100
Monthly family Income Per Month	Less than Rs. 20000	22
	20000-30000	34
	30000-40000	23
	Above 50000	21
Total		100

For the purpose of analysis, the impact of demographical and socio-economic factors on the studying customer behaviour towards the organised retailing, the above attributes are considering like age, gender, marital status, education, occupation, monthly household income, family size. From the above table it is clear that 45 percent of the respondents are male and 55 percent are female. It is found that dominating age group among the respondents was 20-30 that contributes 42 percent followed by 30-40 age groups. The study showed that the 53 percent of the respondents are single and 43 percent are married. Majority of the respondents 35 percent are graduates and 31 percent are post graduates respectively. This reveals that education level also plays a dominant role in the selecting the retail outlets. From the above data it is clear that 30 percent of the respondents are students and 25 percent are private employees. Maximum respondents were belonging to joint family i.e. 64 percent and 36 per cent to nuclear family. 34 percent of the respondents are having 20000-30000 monthly household income followed by the 30000-40000.

**TABLE 2: FREQUENCY OF VISIT TO ORGANISED RETAILS**

Frequency of visit	Number of respondents	Percentage(%)
Weekly	9	9
Monthly	46	46
Quarterly	11	11
On unplanned basis	34	34
Total	100	100

As shown in the above table it is clear that only 9% of the respondent are visiting the retails on weekly bases whereas majority of the respondent that is 46% are visiting on monthly bases followed by 11% on quarterly bases. 34% visit the store on unplanned bases. This reveals that many who fall into the bracket of middle class family prefer to shop under single roof for their monthly purchase of grocery items.

TABLE 3: STORES BEFORE BUYING FROM ORGANISED RETAIL OUTLETS

Shop	No of Respondent	Percentage
Neighbourhood Store	20	20
Wholesale Market	27	27
Convenient Store	38	38
Other Stores	15	15

From the above table it is clear that maximum 38% of the respondents were purchasing from convenient stores followed by the 27% from the wholesale market before they have moved to organised retail outlets

TABLE 4: PERCENTAGE FREQUENCY DISTRIBUTION OF VARIOUS ATTRIBUTES FOR BUYING FROM ORGANIZED RETAIL OUTLETS IN BELAGAVI CITY

Reasons	Strongly Disagree	%	Can't Say	%	Strongly Agree	%	Total
<b>Product related items buying from organized retail outlets</b>							
Wider product range	0	0	2	2.0	98	98.0	100
Choice of more brands	3	3.0	3	3.0	94	94.0	100
Choice of more pack size	4	4.0	10	10.0	86	86.0	100
Choice of more variants	1	1.0	3	3.0	97	97.0	100
Better product quality	2	2.0	10	10.0	88	88.0	100
Fresh / New stock	4	4.0	12	12.0	84	84.0	100
<b>Price Related items buying from organized retail outlets</b>							
Promotional schemes	0	0	9	9.0	91	91.0	100
Discount/lesser price	3	3.0	9	9.0	88	88.0	100
<b>Outlet Related items buying from organized retail outlets</b>							
Freedom of choosing products /brands	4	4.0	6	6.0	92	92.0	100
Better parking facility	0	0	7	7.0	93	93.0	100
Attractive display	4	4.0	7	7.0	89	89.0	100
Better ambience	3	3.0	12	12.0	85	85.0	100
One stop shopping	0	0	3	3.0	97	97.0	100
Better service	2	2.0	12	12.0	86	86.0	100
Variety of modes of payment	3	3.0	13	13.0	84	84.0	100
<b>Location Related items buying from organized retail outlets</b>							
Closer to my house	20	20.0	25	25.0	55	55.0	100
Proximity to my place of work	20	20.0	25	25.0	65	65.0	100
Easy to access	5	5.0	25	25.0	70	70.0	100
<b>Others items buying from organized retail outlets</b>							
Family shopping	4	4.0	17	17.0	79	79.0	100
Entertainment	3	3.0	20	20.0	77	77.0	100
Save time	12	12.0	18	18.0	70	70.0	100
Air-conditioned outlets	0	0	11	11.0	89	89.0	100
Home delivery	7	7.0	23	23.0	70	70.0	100

It is reveal from above table that what made the respondents to move towards organised retailing the above data was collected and it was found that there are various attributes which influence the buying behaviour of customers. Mainly customer gets attracted towards organised retailing because of the different services provided by the retailer to the customer. According to data collected it was found that most of respondent's strongly agree to the services provided by the retailer to customer.

TABLE 5: SATISFACTION LEVEL TOWARDS SERVICE PROVIDED AT ORGANIZED RETAIL OUTLETS

Parameter	Level of satisfaction (%)				
	HS	S	N	DS	HDS
Quality of service	50	35	10	5	0
Self service	28	42	20	8	2
Product price range	18	38	32	10	2
Systematic display	22	38	26	11	3
Time saving	25	45	20	6	4
Fast checkout	18	40	22	14	6
Easy accessible layout	20	45	30	3	2
Parking facilities	8	22	30	35	5
Trolley facilities	24	35	26	18	08
Home delivery facilities	15	35	40	8	2
Store entrance and walkways	20	40	35	2	3
Variety of mode of payment	10	30	20	25	15

To know the satisfaction level among the respondents the above information was gathered. Five scale rating technique was used highly satisfied-HS, Satisfied-S, Neutral-N, Dissatisfied-DS, Highly Dissatisfied-HSD. It was found that 50% of the respondents are highly satisfied with quality of the service provided by the organised retail outlets and only 5% were dissatisfied. Most of the respondents are satisfied because they get services like product price range, fast checkout, easy accessible layout etc.

## CONCLUSION

It has been observed that due to the changing demographics, urbanization, and awareness due to electronic media especially internet the customers have multiple options to choose from modern retail outlets. The study highlights that majority of the customers are visiting organized formats for variety, easy availability, cleanliness with additional facility of entertainment for children and convenient parking facility and return gifts etc. Today it has been found that all age group customers prefer to visit organized retail stores because of various customer facilities provided to them. Families with less monthly income prefer shopping with nearby unorganized retail stores where as customers with higher qualification were found to be more attracted towards organized retail outlets.



## REFERENCES

1. **Khan F and Sharma S (2015)**, *A study on consumer behaviour towards grocery retailing in Delhi region of national capital region of India*, International Journal of Business and Management Invention, Vol. 4(11), 37-45.
2. **Pandey S. M. (2012)**, *Organized retailing in India: Challenges and Opportunities*, VSRD International Journal of Business and Management Research, Vol. 2(3), 65-80.
3. **Shenoy S. S. (2013)**, *The saga of Indian retail avalanche*, International Journal of Development Research, Vol. 3(6), 26-29.
4. **Shrivastava R. K (2013)**, *A comparative study of retail scene of two emerging market India and South Africa: An exploratory study*, International Centre for Business Research, Vol. 2, 35-46.
5. **Shukla A. S. (2013)**, *A study of changing consumer behaviour towards convenience stores by entrance of malls in India*, Zenith international journal of business economic and management research, Vol. 1, 2-6.
6. **Telreja M and Jain D (2013)**, *Changing consumer perceptions towards organized retailing from unorganized retailing: An empirical analysis*, International Journal of Marketing Financial Services and Management Research, Vol. 2(6), 73-85.
7. **Unissa M. H (2013)**, *Consumer psychology towards supermarkets*, Indian Journal of Applied Research, 1-3.
8. **Venkatesh N (2013)**, *Indian retail industries market analysis: Issues, challenges and its opportunity for the 21<sup>st</sup> century*, International Journal of Applications or Innovation in Engineering and Management, 164-173.

**CLASSIFIER BASED ANALYSIS FOR LUNG CANCER PATIENTS USING WEKA TOOL**

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**ABSTRACT**

*Lung cancer is the major reason of cancer death globally. Cancer allied mortality for both men and women and its rate is increasing worldwide. Smoking is by far the most important inevitable cause of cancer in the world. The frequency of lung cancer is strongly correlated with cigarette smoking with around 90% of lung cancers get to your feet as an outcome of tobacco use. The possibility of lung cancer rises with the amount of cigarettes smoked over time. Maximum people know that smoking causes cancer but may not realize how many non-smokers get lung cancer. Each year, approximately 16,000 to 24,000 people die of lung cancer, even though they have never smoked. We examined the lung cancer prediction by means of classification algorithm such as Decision table, Multilayer Perception, VFI, NaiveBayes, Logistic, random Forest, Genetic programming, ZeroR and J48 algorithm. The foremost objective of this paper is to provide the former cautionary to the users and the performance analysis of the classification algorithms.*

**KEYWORDS**

data mining, lung cancer, prediction, classification, decision table, multilayer perception, vfi, naivebayes, logistic, random forest, genetic programming, zeror, j48 algorithm.

**1. INTRODUCTION**

Data mining is a vital tool to transform the data into information. Data mining is also called as knowledge mining or knowledge discovery from data. Classification is a data mining procedure used to determine group association for data illustrations. If a person gets lung cancer they could feel symptoms in other places in the body. The lung cancer symptom is used to predict risk level of disease. The purpose of this paper is to estimate the threat level of lung cancer using WEKA tool. The rest of the paper is organized as follows. Section 2 describes various classifiers used for the study like ZeroR, J48, decision table, multilayer perception, VFI, naive Bayes, Logistic, Random Forest and genetic programming. Datasets used are presented in Section 3. Section 4 shows the performance analysis of various classifiers, confusion matrix, time taken by each classifier and the last section concludes the paper.

**2. LITERATURE SURVEY**

YongqianQiang, YouminGuo, Xue Li, Qiuping Wang, Hao Chen, & DuwuCuic [6] conducted clinical and imaging diagnostic rules of peripheral lung cancer by data mining technique, and to explore new ideas in the diagnosis of peripheral lung cancer, and to obtain early-stage technology and knowledge support of computer-aided detecting (CAD). The data were imported into the database after the standardization of the clinical and CT findings attributes were identified. The diagnosis rules for peripheral lung cancer with three data mining technology is same as clinical diagnostic rules, and these rules also can be used to build the knowledge base of expert system. The demonstrated the potential values of data mining technology in clinical imaging diagnosis and differential diagnosis.

Krishnaiah V, Narsimha G, Subhash Chandra N [7] proposed a model for nearly detection and correct diagnosis of the disease which will help the doctor in saving the life of the patient. Using generic lung cancer symptoms such as age, sex, wheezing, shortness of breath, Pain in shoulder, chest, arm, it can predict the likelihood of patients getting a lung cancer disease.

Prashant Naresh [8] applied a pattern prediction tools for a lung cancer prediction system, lung cancer risk prediction system should prove helpful in detection of a person's predisposition for lung cancer. The early prediction of lung cancer should play a pivotal role in the diagnosis process and for an effective preventive strategy.

Thangaraju P, Karthikeyan T, Barkavi G [9] conducted smoking is the biggest risk factor of lung cancer. The more years and larger number of cigarettes smoked the greater the risk of developing lung cancer. The average age of someone diagnosed with lung cancer is 65 to 70 years old, but people who are younger can develop lung cancer. Young adults who have never smoked also can develop lung cancer.

Ravi Kumar G., Ramachandra.A, Nagamani.K, [10] conducted breast cancer is one of the major causes of death in women when compared to all other cancers. Breast cancer has become the most hazardous types of cancer among women in the world. Early detection of breast cancer is essential in reducing life losses. The comparison among the different data mining classifiers on the database of breast cancer Wisconsin Breast Cancer (WBC), by using classification accuracy. The aims to be establish an accurate classification model for breast cancer prediction, in order to make full use of the invaluable information in clinical data, especially which is usually ignored by most of the existing methods when they aim for high prediction accuracies. It is compare six classification techniques in WEKA software and comparison results that Support Vector Machine (SVM) has higher prediction accuracy than those methods. Different methods for breast cancer detection are explored and their accuracies are compared. With these results, The SVM are more suitable in handling the classification problem of breast cancer prediction, and use of approaches in similar classification problems.

Tapas Ranjan Baitharu, Subhendu Kumar Pani [11] Conducted the most important cause of death for both men and women is the cancer lung cancer is a disease of uncontrolled cell growth in tissues of the lung. Data classification is an important task in KDD (knowledge discovery in databases) process. It has several potential applications. The performance of classifiers is strongly dependent on the data set used for learning. It leads to better performance of the classification models in terms of their predictive or descriptive accuracy, diminishing of computing time needed to build models as they learn faster, and better understanding of the models. A comparative analysis of data classification accuracy using lung cancer data in different scenarios is presented. The predictive performances of popular classifiers are compared for the prediction.

### 3. PERFORMANCE MEASURES

#### 1. ACCURACY CLASSIFICATION

All classification result could have an error rate and it may fail to classify correctly. So accuracy can be calculated as follows. Accuracy = (Instances Correctly Classified / Total Number of Instances)\*100 %.

#### 2. MEAN ABSOLUTE ERROR (MAE)

MAE is the average of difference between predicted and actual value in all test cases. The formula for calculating MAE is given in equation shown below:

$$MAE = (|a_1 - c_1| + |a_2 - c_2| + \dots + |a_n - c_n|) / n$$

Here 'a' is the actual output and 'c' is the expected output.

#### 3. ROOT MEAN SQUARED ERROR (RMSE)

RMSE is used to measure differences between values predicted by a model and the values actually observed. It is calculated by taking the square root of the mean square value.

#### 4. CONFUSION MATRIX

A confusion matrix contains information about actual and predicted classifications done by a classification system.

TABLE 1

	MAE	RMSE
1.J48	0.0903	0.2608
2.Decision Table	0.2468	0.3016
3.Logistic	0.0409	0.2005
4.Multilayer Perceptron	0.0643	0.2155
5.NaiveBayes	0.0426	0.1603
6.RandomForest	0.0792	0.2138
7.VFI	0.277	0.3448
8.ZeroR	0.2285	0.3249
9.Genetic Programming	0.2987	0.2567

### 4. PERFORMANCE ANALYSIS

In this study mainly classification algorithms such as SVM, Decision Table and J48 are applied on type Lung Cancer Disease dataset in the WEKA tool and the performance is measured.

All the attributes in data set are displayed in row format in the left half and on the right side is bar graphs represent the distributions of the different attributes for data mining. Class is predicting the risk attributes for 3 distinct in Label Low, Medium, High.

FIGURE 1: LUNG CANCER RISK PREDICTION

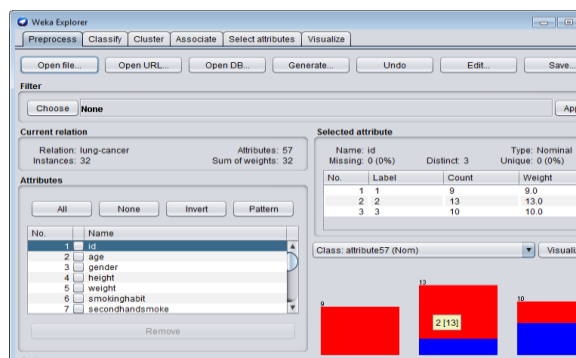


FIGURE 2: J48 ALGORITHM

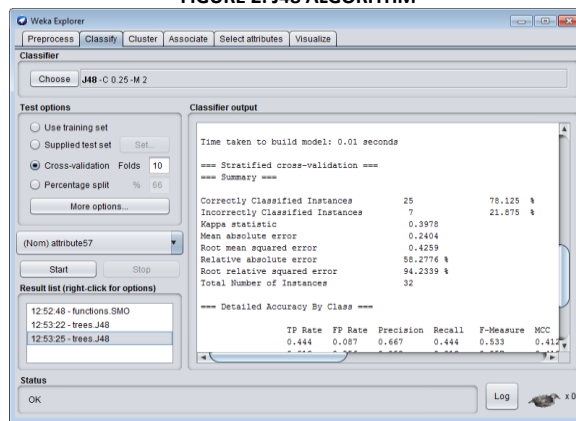
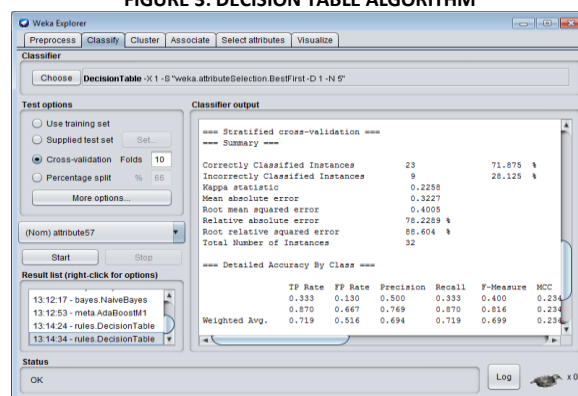


FIGURE 3: DECISION TABLE ALGORITHM



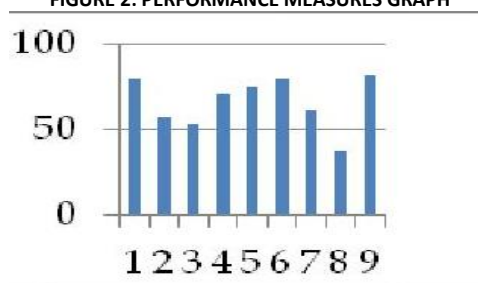
## 5. RESULTS

Ranking is done on the basis of accuracy and in case of tie time complexity is used to determine which algorithm performs better. Number of features get reduced from 56 to 4 by using cfs Subset Eval and genetic search.

TABLE 2: COMPARISON OF ALGORITHMS

Classifiers	Accuracy	Time Complexity(ms)	Ranking
J48	87.5%	450	4
Decision Table	84.375%	359	7
Logistic	93.75%	812	2
MultilayerPerceptron	90.625%	4137	3
NaiveBayes	96.875%	250	1
Random Forest	87.5%	2129	5
VFI	84.375%	581	8
ZeroR	81.25%	250	9
GeneticProgramming	85%	28739	6

FIGURE 2: PERFORMANCE MEASURES GRAPH



## 6. CONCLUSIONS AND FUTURE WORK

Data mining plays a major role in extracting the hidden information the medical database. The data pre-processing is used in order to increase the quality of the data. This model is made based on the UCI repository dataset. The testing has been successfully performed with a number of data mining classification techniques and it is found that the Naïve Bayes algorithm provides a superior performance over the supplied data set with the accuracy of 96.5%. It is understood that the data mining can suggestively help in the Lung Cancer research and finally develop the quality of health care of Lung Cancer patients.

## REFERENCES

- Anuj Gupta "Classification of Complex UCI Datasets Using Machine Learning and Evolutionary Algorithms", International Journal of Scientific & Technology Research Volume 4, Issue 05, May 2015
- Lawrence A. Loeb, Virginia L. Ernster, Kenneth E. Warner, John Abbotts, and John Laszlo "Smoking and Lung Cancer", on July 17, 2014.
- Ada, RajneetKaur, Early Detection and Prediction of Lung Cancer Survival using Neural Network Classifier International Journal of Application or Innovation in Engineering & Management (IIAEM)Volume 2, Issue 6, June 2013.
- Sang Min Park, Min Kyung Lim, Soon Ae Shin & Young Ho Yun 2006, Impact of prediagnosis smoking, Alcohol, Obesity and Insulin resistance on survival in Male Cancer Patients: National Health Insurance corporation study, Journal of clinical Oncology, Vol.24, Number 31 November 2006.
- I. T. T. HIGGINS, "Commentary On "Possible effects Noccupational Lung Cancer from Smoking Related Changes In The Mucus Content Of The Lung", Department of Epidemiology, School of Public Health, The University of Michigan, Ann Arbor, 22 November 1982.
- YongqianQiang, YouminGuo, Xue Li, Qiuping Wang, Hao Chen, &DuwuCuic, The Diagnostic Rules of Peripheral Lung Cancer Preliminary study based on Data Mining Technique, Journal of Nanjing Medical University, Vol. 21(3):190-195.
- Krishnaiah,V., Narsimha,G., SubhashChandra,N., Diagnosis of Lung IJISSET - International Journal of Innovative Science, Engineering & Technology, Vol. 3 Issue 2, February 2016.Cancer Prediction System Using Data Mining Classification Techniques, et al,/(IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 4 (1), 2013.
- PrashantNaresh, Early Detection of Lung Cancer Using Neural Network Techniques, Journal of Engineering Research and Applications Vol. 4, Issue 8, August 2014.
- Thangaraju P, Karthikeyan T, Barkavi G,Mining Lung Cancer Data for Smokers and Non-Smokers by Using Data Mining Techniques, International Journal of Advanced Research in Computer and Communication Engineering Vol. 3, Issue 7, July 2014.
- Ravi Kumar G., Ramachandra.A, Nagamani.K, An Efficient Prediction of Breast Cancer Data Using Data Mining Techniques, International Journal of Innovations in Engineering and Technology (IJET) Vol. 2 Issue 4 August 2013.
- Tapas RanjanBaitharu, Subhendu Kumar Pani A, Comparative Study of Data Mining Classification Techniques using Lung Cancer Data, International Journal of Computer Trends and Technology (IJCTT) – volume 22 Number 2–April 2015.
- Mary KirubaRani.V, SafishMary.M, Predicting Progression of Primary Stage Cancer to Secondary Stage Using Decision Tree Algorithm International Journal of Advanced Information Science and Technology (IIAIST).

## IMPORTANCE OF MUTUAL FUNDS IN INDIA

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## ABSTRACT

*At present Indian financial markets are working more efficient and significant to control inflation, mutual funds as a part of financial markets become popularized among investors because of their convenient nature and they also facilitate easy operations with better gains. Most of the investors in India investing in equity markets rather than mutual funds, but mutual funds are very good tool to control uncertainty in the market. So that it is the time to create the awareness about mutual funds in India. Mutual Funds provide a platform for an investor to participate in the Indian capital market with professional fund management irrespective of the background of the investors. Investment in Indian mutual fund industry is growing briskly. So Many risk free with good returns schemes are available in mutual funds market, but most of the investors are not aware of the benefits of investment in mutual funds. With this paper the investors will know the importance of mutual funds.*

## KEYWORDS

financial markets, mutual funds.

## INTRODUCTION

**M**utual Funds are professionally managed pool of money from a group of investors. A Mutual fund manager invests your funds in securities including stocks and bonds, Money Market instruments or some combination and decides the best time to buy and sell. By pooling your resources with other investors in Mutual Funds, you can diversify even a small investment over a wide spectrum. It pools the savings, particularly of the relatively small investors, and invests them in a well-diversified portfolio of sound investment. As an investment intermediary, it offers a variety of services/advantages to the relatively small investors who on their own cannot successfully construct and manage investment portfolio mainly due to the small size of their funds, lack of expertise and experience, and so on. These services include the diversification of portfolio, expertise of the professional management, liquidity of investment, tax shelter, reduced risk and reduced cost.

Mutual fund is the most suitable investment mode for the common man as it offers an opportunity to invest in a diversified, professionally managed portfolio at a relatively low cost. Anybody with an investible surplus of as little as a few thousand rupees can invest in mutual funds. Each Mutual fund scheme has a defined investment objective and strategy.

With the emergence of the capital market at the centre stage of the Indian financial system from its marginal role a decade earlier, the Indian capital market also witnessed during the same period a significant institutional development in the form of diversified structure of Mutual Funds. A Mutual fund is a special type of investment institution which acts as an investment conduit.

## REVIEW OF LITERATURE

Ravi Vyas (2012) conducted a study on investor's behaviour and perception of mutual funds in Indore city found that Mutual fund companies is not giving full support for the investors in terms of advisory services, participation of investor in portfolio design, full disclosure of related information to investor, proper consultancy and government support also very less

Singh and Jha (2009) conducted a study on awareness & acceptability of mutual funds and found that consumers basically prefer mutual fund due to return potential, liquidity and safety and they were not totally aware about the systematic investment plan. The investors' will also consider various factors before investing in mutual fund

Desigan et al (2006) conducted a study on women investors' 'perception towards investment and found that women investors' 'basically are indecisive in investing in mutual funds due to various reasons like lack of knowledge about the investment protection and their various investment procedures, market fluctuations, various risks associated with investment, assessment of investment and redressal of grievances regarding their various investment related problems. Savings is a habit specially embodied into women. Even in the past, when women mainly depended on their spouses' income, they used to save to meet emergencies as well as for future activities. In those days, women did not have any awareness about various investment outlets. But as time passed, the scenario has totally changed. Ramamurthy and Reddy (2005) conducted a study to analyze recent trends in the mutual fund industry and draw a conclusion that the main benefits for small investors' due to efficient management, diversification of investment, easy administration, nice return potential, liquidity, transparency, flexibility, affordability, wide range of choices and a proper regulation governed by SEBI. The study also analyzed about recent trends in mutual fund industry like various exit and entry policies of mutual fund companies, various schemes related to real estate, commodity, bullion and precious metals, entering of banking sector in mutual fund, buying and selling of mutual funds through online. Anand and Murugaiah (2004) had studied various strategic issues related to the marketing of financial services. They found that recently this type of industry requires new strategies to survive and for operation. For surviving they have to adopt new marketing strategies and tactics that enable them to capture maximum opportunities with the lowest risks in order to enable them to survive and meet the competition from various market players globally

## OBJECTIVES OF THE STUDY

1. To provide the awareness regarding mutual funds to investors
2. To know the mutual fund market in India.

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank. The history of mutual funds in India can be broadly divided into four distinct phases

## First Phase – 1964-87

Unit Trust of India (UTI) was established on 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs. 6,700 crores of assets under management

**Second Phase – 1987-1993 (Entry of Public Sector Funds)**

1987 marked the entry of non-UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non-UTI Mutual Fund established in June 1987 followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund in June 1989 while GIC had set up its mutual fund in December 1990.

At the end of 1993, the mutual fund industry had assets under management of Rs. 47,004 crores.

**Third Phase – 1993-2003 (Entry of Private Sector Funds)**

With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993.

The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations 1996.

The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions. As at the end of January 2003, there were 33 mutual funds with total assets of Rs. 1,21,805 crores. The Unit Trust of India with Rs. 44,541 crores of assets under management was way ahead of other mutual funds

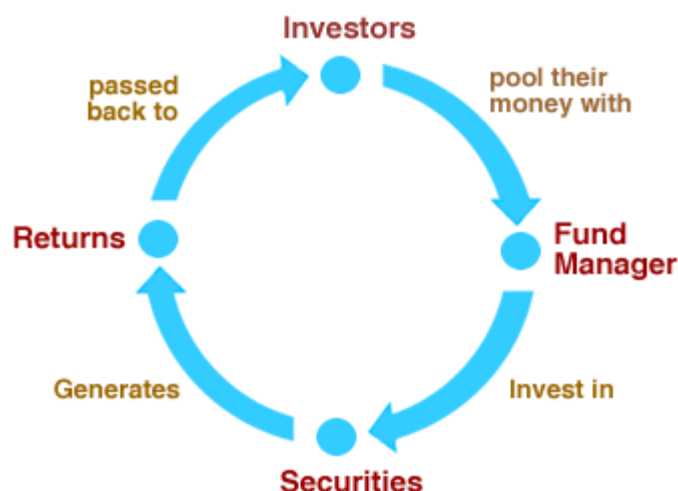
**Fourth Phase – since February 2003**

In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of Rs. 29,835 crores as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs. 76,000 crores of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth. As at the end of September, 2004, there were 29 funds, which manage assets of Rs. 153108 crores under 421 schemes

**MUTUAL FUND PROCESS**

FIG. 1

**CHARACTERISTICS OF MUTUAL FUNDS**

- A Mutual Fund actually belongs to the investors who have pooled their funds. The ownership of the Mutual Fund is in the hands of the investors.
- Mutual funds are trusts or registered associations managed by investment professionals and other service providers, who earn a fee for their services from the fund.
- The pools of the funds are invested in a portfolio of marketable investments (Shares and Securities). The value of the portfolio is updated every day.
- Mutual funds collect money from small investors and in return, they will issue a certificate in units.
- The investor's share in the fund is denoted by "UNITS". The value of the units changes with the change in the portfolio's value every day.
- The profits of investments will be distributed to the unit holders. The unit holders can sell their units in the open market at 'Net Asset Value' (NAV).

**OBJECTIVES OF MUTUAL FUNDS**

The objectives sought to be achieved by Mutual funds are as follows:

1. To provide an opportunity for lower income groups to acquire without much difficulty property in the form of shares.
2. To cater mainly to the need of individual investors whose means are small?
3. To manage investor's portfolio's in a manner that provides regular income, growth, safety, liquidity and diversification.

**ADVANTAGES OF MUTUAL FUNDS****DIVERSIFICATION**

One rule of investing, for both large and small investors, is asset diversification. Diversification involves the mixing of investments within a portfolio and is used to manage risk. For example, by choosing to buy stocks in the retail sector and offsetting them with stocks in the industrial sector, you can reduce the impact of the performance of any one security on your entire portfolio. To achieve a truly diversified portfolio, you may have to buy stocks with different capitalizations from different industries and bonds with varying maturities from different issuers. For the individual investor, this can be quite costly.

By purchasing mutual funds, you are provided with the immediate benefit of instant diversification and asset allocation without the large amounts of cash needed to create individual portfolios. One caveat, however, is that simply purchasing one mutual fund might not give you adequate diversification - check to see if the fund is sector or industry specific. For example, investing in an oil and energy mutual fund might spread your money over fifty companies, but if energy prices fall, your portfolio will likely suffer.



**ECONOMIES OF SCALE**

The easiest way to understand economies of scale is by thinking about volume discounts; in many stores, the more of one product you buy, the cheaper that product becomes. For example, when you buy a dozen donuts, the price per donut is usually cheaper than buying a single one. This also occurs in the purchase and sale of securities. If you buy only one security at a time, the transaction fees will be relatively large.

Mutual funds are able to take advantage of their buying and selling size and thereby reduce transaction costs for investors. When you buy a mutual fund, you are able to diversify without the numerous commission charges. Imagine if you had to buy the 10-20 stocks needed for diversification. The commission charges alone would eat up a good chunk of your savings. Add to this the fact that you would have to pay more transaction fees every time you wanted to modify your portfolio - as you can see the costs begin to add up. With mutual funds, you can make transactions on a much larger scale for less money.

**DIVISIBILITY**

Many investors don't have the exact sums of money to buy round lots of securities. One to two hundred dollars is usually not enough to buy a round lot of a stock, especially after deducting commissions. Investors can purchase mutual funds in smaller denominations, ranging from \$100 to \$1,000 minimums. Smaller denominations of mutual funds provide mutual fund investors the ability to make periodic investments through monthly purchase plans while taking advantage of dollar-cost averaging. So, rather than having to wait until you have enough money to buy higher-cost investments, you can get in right away with mutual funds. This provides an additional advantage - liquidity.

**LIQUIDITY**

Another advantage of mutual funds is the ability to get in and out with relative ease. In general, you are able to sell your mutual funds in a short period of time without there being much difference between the sale price and the most current market value. However, it is important to watch out for any fees associated with selling, including back-end load fees. Also, unlike stocks and exchange-traded funds (ETFs), which trade any time during market hours, mutual funds transact only once per day after the fund's net asset value (NAV) is calculated.

**PROFESSIONAL MANAGEMENT**

When you buy a mutual fund, you are also choosing a professional money manager. This manager will use the money that you invest to buy and sell stocks that he or she has carefully researched. Therefore, rather than having to thoroughly research every investment before you decide to buy or sell, you have a mutual fund's money manager to handle it for you.

**DISADVANTAGES OF MUTUAL FUNDS****FLUCTUATING RETURNS**

Mutual funds are like many other investments without a guaranteed return: there is always the possibility that the value of your mutual fund will depreciate. Unlike fixed-income products, such as bonds and Treasury bills, mutual funds experience price fluctuations along with the stocks that make up the fund. When deciding on a particular fund to buy, you need to research the risks involved - just because a professional manager is looking after the fund, that doesn't mean the performance will be stellar.

Another important thing to know is that mutual funds are not guaranteed by the U.S. government, so in the case of dissolution, you won't get anything back. This is especially important for investors in money market funds. Unlike a bank deposit, a mutual fund will not be insured by the Federal Deposit Insurance Corporation (FDIC).

**DIVERSIFICATION**

Although diversification is one of the keys to successful investing, many mutual fund investors tend to over diversify. The idea of diversification is to reduce the risks associated with holding a single security; over diversification (also known as diworsification) occurs when investors acquire many funds that are highly related and, as a result, don't get the risk reducing benefits of diversification.

**CASH, CASH AND MORE CASH**

As you know already, mutual funds pool money from thousands of investors, so everyday investors are putting money into the fund as well as withdrawing investments. To maintain liquidity and the capacity to accommodate withdrawals, funds typically have to keep a large portion of their portfolios as cash. Having ample cash is great for liquidity, but money sitting around as cash is not working for you and thus is not very advantageous.

**COSTS**

Mutual funds provide investors with professional management, but it comes at a cost. Funds will typically have a range of different fees that reduce the overall payout. In mutual funds, the fees are classified into two categories: shareholder fees and annual operating fees.

The shareholder fees, in the forms of loads and redemption fees, are paid directly by shareholders purchasing or selling the funds. The annual fund operating fees are charged as an annual percentage - usually ranging from 1-3%. These fees are assessed to mutual fund investors regardless of the performance of the fund. As you can imagine, in years when the fund doesn't make money, these fees only magnify losses.

**MISLEADING ADVERTISEMENTS**

The misleading advertisements of different funds can guide investors down the wrong path. Some funds may be incorrectly labelled as growth funds, while others are classified as small cap or income funds. The Securities and Exchange Commission (SEC) requires that funds have at least 80% of assets in the particular type of investment implied in their names. How the remaining assets are invested is up to the fund manager.

However, the different categories that qualify for the required 80% of the assets may be vague and wide-ranging. A fund can therefore manipulate prospective investors by using names that are attractive and misleading. Instead of labelling itself a small cap, a fund may be sold as a "growth fund". Or, the "Congo High-Tech Fund" could be sold with the title "International High-Tech Fund".

**EVALUATING FUNDS**

Another disadvantage of mutual funds is the difficulty they pose for investors interested in researching and evaluating the different funds. Unlike stocks, mutual funds do not offer investors the opportunity to compare the P/E ratio, sales growth, earnings per share, etc. A mutual fund's net asset value gives investors the total value of the fund's portfolio less liabilities, but investors don't know which fund is better than other.

**TYPES OF MUTUAL FUNDS****1. OPEN - ENDED SCHEME**

An open-ended scheme is a scheme in which an investor can buy and sell units on a daily basis. The scheme has a perpetual existence and flexible, ever changing corpus. Open-Ended schemes do not have a fixed maturity period. The investors are free to buy and sell any number of units, at any point of time, at prices that are linked to the NAV of the units.

In these schemes the investor can invest and disinvest any amount, any time after a short initial lock - in period. This scheme gives investors with instant liquidity and fund announces sale and repurchase price from time to time. The units can be bought from and sold to any Mutual Fund.

**ADVANTAGES OF OPEN-ENDED FUNDS OVER CLOSE-ENDED FUNDS**

- ✓ Any time Entry Option.
- ✓ This provides ready liquidity to the investors and avoids reliance on transfer deeds, signature verifications and bad deliveries.
- ✓ Allows to enter the fund at any time and even to invest at regular intervals.
- ✓ Any time Exit Option.

Open ended schemes include:

- a. **Debt/ Income** -In a debt/income scheme, a major part of the investable fund is channelized towards debentures, government securities, and other debt instruments. Although capital appreciation is low (compared to the equity mutual funds), this is a relatively low risk-low return investment.

- b. Money Market/ Liquid** - This is ideal for investors looking to utilize their surplus funds in short term instruments while awaiting better options. These schemes invest in short-term debt instruments.
- c. Equity/ Growth** - Equities are a popular mutual fund category amongst retail investors. Although it could be a high-risk investment in the short term, investors can expect capital appreciation in the long run
- i. Index Scheme** - Index schemes are a widely popular concept in the west. These follow a passive investment strategy where your investments replicate the movements of benchmark indices like Nifty, Sensex.
- ii. Sectoral Scheme** - Sectoral funds are invested in a specific sector like infrastructure, IT, pharmaceuticals, etc. or segments of the capital market like large caps, mid-caps, etc. This scheme provides a relatively high risk-high return opportunity within the equity space
- iii. Tax Saving** - As the name suggests, this scheme offers tax benefits to its investors. The funds are invested in equities thereby offering long-term growth opportunities. Tax saving mutual funds (called Equity Linked Savings Schemes) has a 3-year lock-in period.
- iv. Balanced** - This scheme allows investors to enjoy growth and income at regular intervals. Funds are invested in both equities and fixed income securities; the proportion is pre-determined and disclosed in the scheme related offer document.

## 2. CLOSE – ENDED SCHEME

A Close-ended scheme has a stipulated maturity period. E.g. 5-7 years. A Close-ended scheme is one in which the subscription period for the Mutual Fund remains open only for a specific period, called the '**redemption period**'. At the end of this period, the entire corpus is disinvested and the proceeds distributed to unit holders. After final distribution the scheme ceases to exist. Such schemes can be rolled over by approval of unit holders.

$$\text{NAV} = \frac{\text{Market value of the fund's investments} + \text{Receivables} + \text{Accrued Income} - \text{Liabilities} - \text{Accrued Expenses}}{\text{Number of Outstanding units}}$$

## REASON'S FOR FLUCTUATIONS IN NAV

- ✓ Investor's doubts about the abilities of the fund's management.
- ✓ Lack of sales effort (Brokers earn less commission on closed end schemes than on open ended schemes).
- ✓ Riskiness of the fund.
- ✓ Lack of marketability of the fund's units.

**a. Capital Protection** - The primary objective of this scheme is to safeguard the principal amount while trying to deliver reasonable returns. These invest in high-quality fixed income securities with marginal exposure to equities and mature along with the maturity period of the scheme.

**b. Fixed Maturity Plans (FMPs)** - FMPs, as the name suggests, are mutual fund schemes with a defined maturity period. These schemes normally comprise of debt instruments which mature in line with the maturity of the scheme, thereby earning through the interest component (also called coupons) of the securities in the portfolio.

## 3. INTERVAL

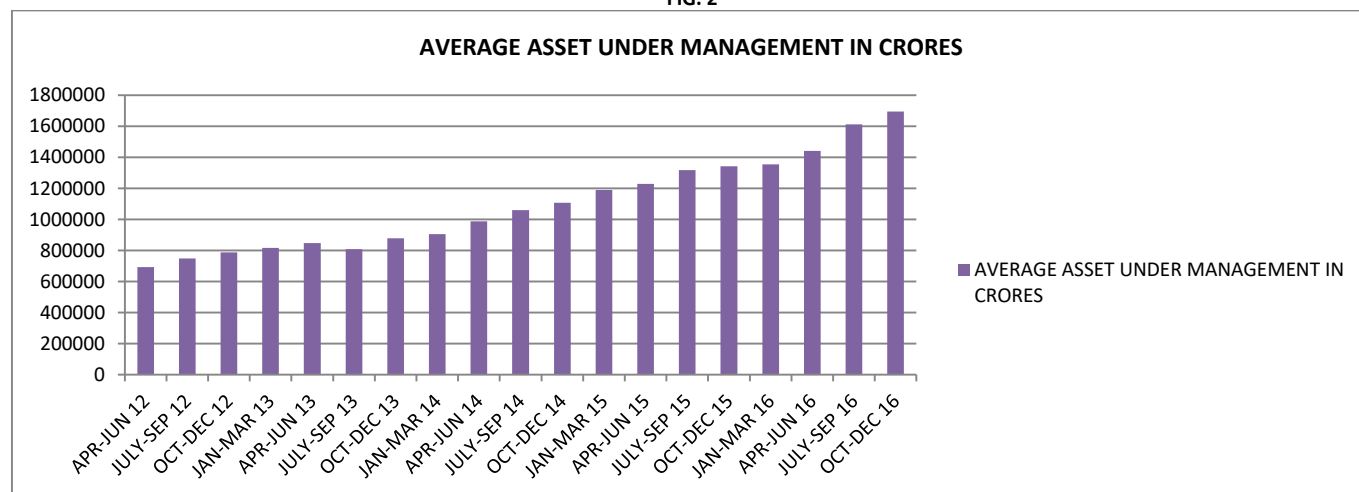
Operating as a combination of open and closed ended schemes, it allows investors to trade units at pre-defined intervals.

Following table gives us the information related to average asset under management on quarterly basis from 2012 to 2016 in India.

TABLE 1

PERIOD	AVERAGE ASSET UNDER MANAGEMENT IN CRORES
APR-JUN 12	692789
JULY-SEP 12	747333
OCT-DEC 12	786544
JAN-MAR 13	816657
APR-JUN 13	846675
JULY-SEP 13	808295
OCT-DEC 13	876921
JAN-MAR 14	905120
APR-JUN 14	987240
JULY-SEP 14	1059738
OCT-DEC 14	1106279
JAN-MAR 15	1188690
APR-JUN 15	1228521
JULY-SEP 15	1315760
OCT-DEC 15	1340798
JAN-MAR 16	1353443
APR-JUN 16	1441027
JULY-SEP 16	1610729

FIG. 2



Source: AMFI

The trading volume on mutual fund market has seen a steady increase since last 5 years. In 1st quarter of 2012 Rs.6,92,789 crores and after wards the mutual fund market increasing continuously. And in last quarter of 2016 is Rs.16,93,339 crores.

## CONCLUSION

In India mutual fund market has increased drastically from last 5 years 2012-13 to 2016-17 i.e 692789 crores (1<sup>st</sup> quarter of 2012) in 2012-13 to 1693339 crores (last quarter in 2016) in 2016-17. It means 3 times increased within 5 years. And we can see the tremendous change in mutual fund market quarter to quarter. This change affected by some factors like government policies, budgets, bullion market, inflation, economic and political condition etc.

## REFERENCES

1. Anand, S. and Murugaiah, V. (2004), **Marketing of financial services: strategic issues**, SCMS Journal of Indian Management.
2. Avadhani, V. A. (2003), **Investment management**, Saujanya Books Ltd, New Delhi.
3. Desigan et al (2006), **Women Investors' Perception Towards Investment: An empirical Study**, Indian Journal of Marketing.
4. Pandian, P. (2003), **Security Analysis & Portfolio Management**, Vikas Publication Pvt. Ltd.
5. Ramamurthy, B. M. and Reddy, S. (2005), **Recent Trends in Mutual Fund Industry**, SCMS Journal of Indian Management.
6. Singh, B. K. and Jha, A.K. (2009), **"An empirical study on awareness & acceptability of mutual fund"**, 49-55, Regional Student's Conference, ICWAI.

## WEBSITES

7. [www.amfiindia.com](http://www.amfiindia.com)
8. [www.nseindia.com](http://www.nseindia.com)

**MAKE IN INDIA: AN EFFECTIVE TOOL FOR TRANSFORMATION**

**BINEYDEEP SINGH**  
**PRODUCT MANAGER MARKETING**  
**KOHLER INDIA PVT. LTD.**  
**GURGAON**

**ABSTRACT**

*Make in India campaign launched by the Indian government focuses on building the effective physical infrastructure as well as improving the market of digital network in the country to make it a global hub for business; ranging from satellites to submarines, cars to software's, pharmaceuticals to ports, paper to power, etc. The major objective behind the initiative is to focus on job creation and skill enhancement in 25 sectors of the economy and to locally manufacture as many as 181 products. The initiative also aims at high quality standards and minimizing the impact on the environment. The initiative hopes to attract capital and technological investment in India. It represents a complete change of the Government's mindset; a shift from issuing authority to business partner, in keeping with Prime Minister's tenet of minimum government with maximum governance. With impetus on developing industrial corridors and smart cities, the government aims to ensure holistic development of the nation. The corridors would further assist in integrating, monitoring and developing a conducive environment for the industrial development and will promote advance practices in manufacturing. The major issues identified are: shortage of fund, technological issues, obstructions by worker union, lack of skilled workers and need to inculcate research.*

**KEYWORDS**

minimum government, maximum governance, intellectual property regime, zero defects-zero effect, attitudinal shift.

**HISTORICAL BACKGROUND**

India was called 'Sone Ki Chirria'. This implied that there was plenty in India and precisely the reasons that many invaders raided India and plundered its wealth and also destroyed the artisan of India. It is rightly said that India was considered to be a manufacturing hub in ancient times. India's handicrafts manufactured in village huts and houses all over the country were prized in foreign countries. Working on the locally available raw materials and with the skills and tools handed over to them by their forefathers, the village artisans produced products of high aesthetic quality with ease and efficiency. Generations of such workers provided India with a long and glorious tradition of artistic handicrafts of a varied nature. Among all the industries of early times, the textiles, especially the cotton textile industry, had the place of pride both in India and in the outside world. There is enough evidence to show that the Indians knew weaving some 1,500 years before Christ, when the Europeans were still covering themselves with animal skins. Pyrrard, the 17th century Portuguese writer has recorded that everyone from the Cape of Good Hope to China was clothed from head to foot in Indian made garments. The fine Dhaka muslin was the envy of the world for centuries together. Iron and Steel industry was also in advanced stage at that time. The iron column near Qutab Minar in Delhi is standing in the open and is exposed to sun, rain and weathering over 1,500 years old and it still looks fresh. It seems that this column will continue to stand there till eternity. It is believed that the famous Damascus swords were made from steel imported from India. In addition to cotton textiles and steel industries; wood, stone and ivory carvings, silk textiles, pottery, bronze, brass, silver and copper works, dyeing and calico printing were also famous throughout the world. In fact, after the Industrial Revolution, manufacturing industries were dominated by the Western Countries.

**FOUR PHASES OF MANUFACTURING IN INDIA**

India's industrial development has gone through four distinct phases. The present initiative of Prime Minister Modi's 'Make in India' is the fourth such initiative. It is in India's interest that this attempt succeeds in taking manufacturing's share in GDP to 25% by 2025.

**PHASE I: THE BRITISH ERA**

In 1922, the imperial government accepted a recommendation of the Fiscal Commission in 1922 to extend tariff protection to a few Indian businesses as a measure of support to encourage localization of manufacturing. The policy of 'discriminating protection' gave a boost to such industries as cotton textiles, sugar and iron and steel. In fact, the Second World War promoted industrial development on the eve of independence. The disruption of maritime trade by the war cut several imports off, giving a boost to domestic manufacturing. On top of this, war demand for clothes, munitions and other supplies further increased demand for Indian manufactures. New industries like ship building and aviation took root during this brief interlude.

**PHASE II: THE NEHRU ERA**

India's second, and more concerted, attempt to make in India followed the adoption of the Industrial Policy Resolution of 1948 and the articulation of an industrial development strategy, popularly called the Bombay Plan, by the leadership of Indian business. The creation of an industrial base by the public sector was one such idea. During the five year plans the share of manufacturing in national income went up from around 8% in 1950 to around 12% in 1965. This share remained stuck in the range of 12-13.0% for another decade. It was only in the late 1970s and the 1980s that the average annual share of manufacturing in national income rose to around 15%. A surge in industrial activity in the 1980s and 1990s enabled a further increase in the share to around 16%. Thus, over half a century of post-independence development, between 1950 and 2000, India managed to only double the share of manufacturing in national income, and that ratio has since not improved by much. Several East and South-east Asian economies were able to treble and even quadruple the share of manufacturing in national income during the same period. Clearly, something had to be done.

**PHASE III: THE RAO & SINGH ERA**

During 1991-92, Narasimha Rao's decision to end the infamous 'licence-permit raj', to decontrol, deregulate and open up several manufacturing sectors to private investment. The 1990s saw another round of growth in manufacturing activity. More importantly, it saw the flowering of Indian enterprise across several sectors including automobiles, plastics, consumer goods, pharmaceuticals and so on. But, this wave of manufacturing growth petered out after a decade. After 2000, Indian manufacturing has had to deal with two major challenges. First, the more liberalised global trading environment following the creation of the World Trade Organisation and India's decision to sign on to several free trade agreements, especially with East and South-east Asian economies and second is of increased trade with China. As if these external challenges were not enough, domestic business also found the home environment for industrial development deteriorating. While the licence raj had gone, domestic business – big, medium and small – has been complaining about the suffocating tentacles of a hydra-headed 'inspector raj', of corruption – big and petty – unhelpful land, labour and environment policies and deteriorating logistics and infrastructure. While in Phase II, Indian business could only complain, in Phase III they have had the option of opting out and investing overseas. Several Indian manufacturing establishments have invested abroad, finding foreign lands more hospitable.

**PHASE IV: THE MODI ERA**

Prime Minister Narendra Modi launched "Make in India" on 25<sup>th</sup> September 2014 in a function at the Vigyan Bhavan. On 29<sup>th</sup> December 2014, a workshop was organised by the Department of Industrial Policy and Promotion which was attended by PM Modi, his cabinet ministers and chief secretaries of states as well as various industry leaders. It is an initiative to make a call to the top business investors all across the world (national or international) to invest in India. It is a big opportunity to all the investors to set up their business (manufacturing, textiles, automobiles, production, retail, chemicals, IT, ports, pharmaceuticals, hospitality, tourism, wellness, railways, leather, etc) in any field in the country. This attractive plan has resourceful proposals for the foreign companies to set up manufacturing powerhouses in India.

The major objective behind the initiative is to focus on job creation and skill enhancement in 25 sectors of the economy. The initiative also aims at high quality standards and minimising the impact on the environment. The initiative hopes to attract capital and technological investment in India. The campaign was designed by Wieden+Kennedy. Under the initiative, brochures on the 25 sectors and a web portal were released. Before the initiative was launched, foreign equity caps in various sectors had been relaxed. The application for licenses was made available online and the validity of licenses was increased to three years. Various other norms and procedures were also relaxed. In fact, manufacturing currently contributes just over 15% to the national GDP. The aim of this campaign is to grow this to a 25% contribution as seen with other developing nations of Asia. In the process, the government expects to generate jobs, attract much foreign direct investment, and transform India into a manufacturing hub preferred around the globe.

The logo for the Make In India campaign is an elegant lion, inspired by the Ashoka Chakra and designed to represent India's success in all spheres. The campaign was dedicated by the Prime Minister to the eminent patriot, philosopher and political personality, Pandit Deen Dayal Upadhyaya who had been born on the same date in 1916. The Prime Minister also laid a robust foundation for his vision of a technology-savvy Digital India as complementary to Make In India. He stressed on the employment generation and poverty alleviation that would inevitably accompany the success of this campaign.

In August 2014, the Cabinet of India allowed 49% foreign direct investment (FDI) in the defence sector and 100% in railways infrastructure. The defence sector previously allowed 26% FDI and FDI was not allowed in railways. This was in hope of bringing down the military imports of India. Earlier, one Indian company would have held the 51% stake, this was changed so that multiple companies could hold the 51%. Between September 2014 and November 2015, the government received 1.20 lakh crore (US\$18 billion) worth of proposals from companies interested in manufacturing electronics in India. 24.8% of smartphones shipped in the country in the April–June quarter of 2015 were made in India, up from 19.9% the previous quarter.

## CONCEPT OF MAKE IN INDIA

### PROGRAM

The Make in India initiative was launched by Prime Minister in September 2014 as part of a wider set of nation-building initiatives. Devised to transform India into a global design and manufacturing hub, Make in India was a timely response to a critical situation: by 2013, the much-hyped emerging markets bubble had burst, and India's growth rate had fallen to its lowest level in a decade. The promise of the BRICS Nations (Brazil, Russia, India, China and South Africa) had faded, and India was tagged as one of the so-called 'Fragile Five'. Global investors debated whether the world's largest democracy was a risk or an opportunity. India's 1.2 billion citizens questioned whether India was too big to succeed or too big to fail. India was on the brink of severe economic failure.

### PROCESS

Make in India was launched by Prime Minister against the backdrop of this crisis, and quickly became a rallying cry for India's innumerable stakeholders and partners. It was a powerful, galvanising call to action to India's citizens and business leaders, and an invitation to potential partners and investors around the world. But, Make in India is much more than an inspiring slogan. It represents a comprehensive and unprecedented overhaul of out-dated processes and policies. Most importantly, it represents a complete change of the Government's mindset – a shift from issuing authority to business partner, in keeping with Prime Minister's tenet of 'Minimum Government, Maximum Governance'.

### PLAN

To start a movement, you need a strategy that inspires, empowers and enables in equal measure. Make in India needed a different kind of campaign: instead of the typical statistics-laden newspaper advertisements, this exercise required messaging that was informative, well-packaged and most importantly, credible. It had to (a) inspire confidence in India's capabilities amongst potential partners abroad, the Indian business community and citizens at large; (b) provide a framework for a vast amount of technical information on 25 industry sectors; and (c) reach out to a vast local and global audience via social media and constantly keep them updated about opportunities, reforms, etc.

The Department of Industrial Policy & Promotion (DIPP) worked with a group of highly specialised agencies to build brand new infrastructure, including a dedicated help desk and a mobile-first website that packed a wide array of information into a simple, sleek menu. Designed primarily for mobile screens, the site's architecture ensured that exhaustive levels of detail are neatly tucked away so as not to overwhelm the user. 25 sector brochures were also developed: Contents included key facts and figures, policies and initiatives and sector-specific contact details, all of which was made available in print and on site.

### PARTNERSHIPS

The Make in India initiative has been built on layers of collaborative effort. DIPP initiated this process by inviting participation from Union Ministers, Secretaries to the Government of India, state governments, industry leaders, and various knowledge partners. Next, a National Workshop on sector specific industries in December 2014 brought Secretaries to the Government of India and industry leaders together to debate and formulate an action plan for the next three years, aimed at raising the contribution of the manufacturing sector to 25% of the GDP by 2020. This plan was presented to the Prime Minister, Union Ministers, industry associations and industry leaders by the Secretaries to the Union Government and the Chief Secretary, Maharashtra on behalf of state governments.

These exercises resulted in a road map for the single largest manufacturing initiative undertaken by a nation in recent history. They also demonstrated the transformational power of public-private partnership, and have become a hallmark of the Make in India initiative. This collaborative model has also been successfully extended to include India's global partners, as evidenced by the recent in-depth interactions between India and the United States of America.

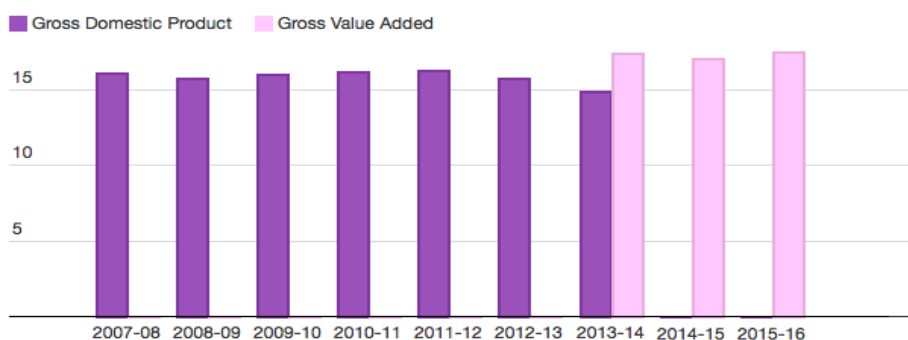
### MARKET SIZE

India's manufacturing sector has the potential to touch US\$ 1 trillion by 2025. There is potential for the sector to account for 25-30 per cent of the country's GDP and create up to 90 million domestic jobs by 2025. Business conditions in the Indian manufacturing sector continue to remain positive.

FIG. 1

### Making in India

Percentage share of manufacturing in Indian economic output



GDP in 2004-05 prices, GVA in 2011-12 prices

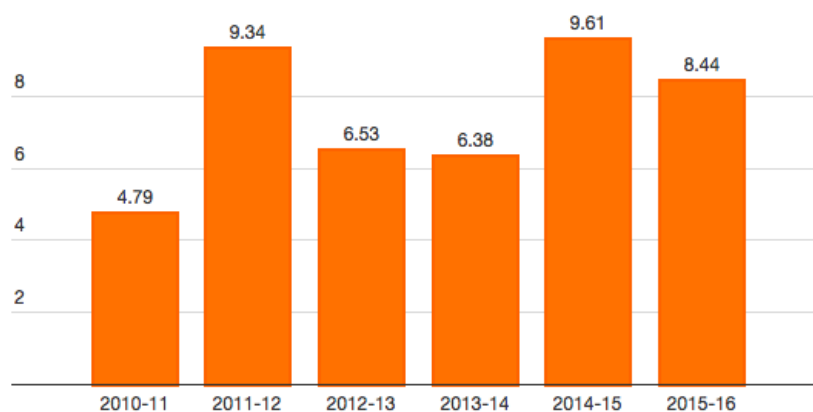
Source: Reserve Bank of India [Get the data](#)

Created with [Datawrapper](#)

FIG. 2

## Foreign investment in Indian manufacturing

Annual FDI inflows to India in manufacturing (US\$ billion)



Data for 2015-16 are provisional, but generally do not change.

Source: Reserve Bank of India, 2015-16 Annual Report [Get the data](#)

Created with [Datawrapper](#)

If we analyze the above data, we can say that no meaningful change is noticed in the share of manufacturing during the last one decade rather there is a slight downward trend. There is no doubt that building infrastructure, liberalizing land and labour laws and improving the ease of doing business is difficult and time-consuming, and will take time to play out. But the Modi government needs to ensure that change is happening and will happen at the growing rate.

Consider the most recent FDI data from the Reserve Bank of India (RBI), broken up by sector, since Make in India specifically concerns manufacturing. After an encouraging jump to a record \$9.6 billion in 2014-15, FDI in manufacturing actually fell to \$8.4 billion in 2015-16 (below the \$9.3 billion it had reached in 2011-12). The percentage of FDI flowing to manufacturing, which has been in the range of 35-40% for the past four years, dropped to 23% in 2015-16. Rather than manufacturing, services — think e-commerce providers like Amazon, Snapdeal and Flipkart, ride-sharing services like Uber and Ola — seem to be drawing a greater share of investment.

### INVESTMENTS

With the help of Make in India drive, India is on the path of becoming the hub for hi-tech manufacturing as global giants such as GE, Siemens, HTC, Toshiba, and Boeing have either set up or are in process of setting up manufacturing plants in India, attracted by India's market of more than a billion consumers and increasing purchasing power. Foreign Direct Investment (FDI) inflows in India's manufacturing sector grew by 82 per cent year-on-year to US\$ 16.13 billion during April-November 2016. India has become one of the most attractive destinations for investments in the manufacturing sector.

### THE SALIENT FEATURES OF THE INITIATIVE

1. **Introduction of new processes** (a single window E-biz platform) - with special focus on ease of doing business which includes de-licensing and deregulation measures to reduce the complexity and significantly increase the speed and transparency.
2. **Infrastructure** – new smart cities and industrial clusters are proposed to be developed in identified industrial corridors having which would have a high-speed connectivity.
3. **Skill development** – new youth-focused programs and institutions dedicated to developing skills will be started.
4. **Strengthening of Intellectual Property Regime** in the country. This will help to protect the innovation.
5. **Opening of crucial sectors** like defence, construction and railways for Foreign Direct Investment (FDI).
6. **Attitudinal shift of Government** from permit issuing authority to true business partner. It also seeks to establish a dedicated team that will guide and assist first-time investors from time to arrival.
7. **The concept of Zero Defect and Zero Effect.** It means we should manufacture goods in such a way that they carry zero defect, that our exported goods are never returned to us and we should manufacture goods with zero effect that they should not have a negative impact on the environment. Sameer Bakshi Company Secretary & Head- Legal & Compliance, Bajaj Allianz Life Insurance Company Ltd.
8. **Major role for Youth:** With 65% of our population below 35 years of age, youth in our country has a major role to play in making this campaign a big success. It has got the required skill and talent to provide the quality resource to the manufacturing industry. The Government and the education institutions should take pro-active measures to harness these strengths through better management and good governance and skill development programmes. The youth should develop an entrepreneur mindset i.e. they should conduct a research, try to find out the gaps in the society and come up with solution.
9. **Impetus to Domestic Innovation – Example of 'Mangalyaan':** Mars Orbiter Mission of India is the best possible example, in recent times that I can think of in regards to the success of the make in India initiative. Every required component in this mission was made indigenously and most of them were made in very small factories. Our scientists got the success in first attempt. The total cost incurred on this mission was lesser than the budget of a Hollywood movie. It is said that the per kilometer cost of the "Mangalyaan" was cheaper than an auto fare in Ahmedabad. This best describes the quality and the potential Indian have. Indeed a new era of economic regeneration has begun in the world, where we can make India a global manufacturing hub.

### RECENT MAJOR INVESTMENTS

Airbus has procured more than US\$ 500 million worth of supplies from India in 2015, registering a growth of 15 per cent annually and has targeted a cumulative procurement of more than US\$ 2 billion over a period of five years up to 2020.

- Apple plans to produce iPhone SE at an upcoming facility in Bengaluru, owned by its partner Wistron, which has upgraded the plant to assemble Apple iPhones.
- Ashok Leyland Ltd has launched its circuit series electric bus, the first ever electric bus designed and engineered entirely in India specifically for Indian road conditions, with a capacity to travel over 150 km on a single charge.
- BSH Home Appliances Group, the leading home appliances manufacturer in Europe, inaugurated its first technology centre in India at Adugodi, Bengaluru, which will enable the company to further develop localised technologies for the Indian market.
- Boeing Company, an American plane maker, and Tata Advanced Systems Ltd (TASL), a fully owned subsidiary of Tata Sons, have entered into a joint venture to set up a new facility in Hyderabad to manufacture Boeing AH-64 Apache helicopter fuselages.



- Canada's Magna International Incorporated has started production at two facilities in Gujarat's Sanand, which will supply auto parts to Ford Motor Co in India and will employ around 600 people at both units.
- Coca-Cola, the US-based beverage giant, plans to invest around Rs 750 crore (US\$ 112.5 million) to set up a food processing unit and a bottling plant at the newly developed Mohasa-Babai industrial estate in Hoshangabad, Madhya Pradesh.
- China based LCD and touchscreen panel manufacturer, Holitech Technology, has announced plans to investing up to US\$ 1 billion in India by the end of 2017.
- Global beverage company Pepsi plans to invest Rs 500 crore (US\$ 75 million) to set up another unit in Maharashtra to make mango, pomegranate and orange-based citrus juices, while biotechnology giant Monsanto plans to set up a seed plant in Buldhana district of Maharashtra.
- Havells India Limited, one of the top Indian consumer electrical equipment producer, plans to set up a new manufacturing unit near Bengaluru by making an investment of Rs 1,059 crore (US\$ 158.85 million), which would be its twelfth plant in India and its first outside north India.
- Hindustan Coca-Cola Beverages plans to set up a bottling plant with an investment of Rs 750 crore (US\$ 112.5 million) in phases at the first industrial area being developed by Government of Madhya Pradesh under the public private partnership in Babai village of Hoshangabad, Bhopal.
- Huawei, the China-based smartphone manufacturer, has entered into an agreement with solutions provider Flextronics Technologies (India) Private Limited, to manufacture its smartphones in India. Flextronics would start by making 3 million smart phones at its facility in Chennai and is expected to generate additional 1,500 jobs.
- Honda Motorcycle & Scooter India plans to invest around Rs 600 crore (US\$ 90 million) to add a new line at its Narsapura facility at Karnataka, and launch at least 10-15 products during FY 2016-17 in the country.
- Force Motors, a utility and commercial vehicles manufacturer, inaugurated its Rs 100 crore (US\$ 15 million) manufacturing facility in Pune, which will supply engines and axles to the Germany-based automobile manufacturer Mercedes-Benz.
- Isuzu Motors, the Japan-based utility vehicle manufacturer, has inaugurated its greenfield manufacturing unit in Sri City, Andhra Pradesh, which was set up for Rs 3,000 crore (US\$ 450 million), with an annual production capacity of 50,000 units and is estimated to generate around 2,000-3,000 jobs.
- Panasonic Corporation, the Japan-based electronics company, plans to set up a new plant at Jhajjar, Haryana, to manufacture refrigerators for the Indian market, and a Research and Development (R&D) center for appliances consisting of two technical divisions to strengthen its product development in the country.
- Tristone Flowtech Group, the Germany-based flow technology systems specialist, has set up a new facility in Pune, which will manufacture surge tank as well as engine cooling and aircharge hose for the Indian market. The company plans to start the production at the plant in the fourth quarter of 2017.
- Tata Power has partnered with US-based Javelin Joint Venture, which is a partnership between Raytheon Company and Lockheed Martin, for its Strategic Engineering Division (SED), in order to create a strategy to co-develop and produce the Javelin missile system and integrate platform mounts to meet Indian requirements.
- Vital Paper Products, one of the major supply chain players in the paper and paper products industry, plans to set up a packaging product unit in the Special Economic Zone (SEZ) of Sri City, Andhra Pradesh, at an investment of Rs 60 crore (US\$ 9 million), which will be operational from April 2017.
- Zopo Mobile, a China-based smartphone manufacturer, plans to invest Rs 100 crore (US\$ 15 million) to set up a manufacturing plant in Noida by the end of 2016, which will have a monthly production capacity of 100,000 units.
- The Government of India has introduced several policy measures in the Union Budget 2017-18 to provide impetus to the manufacturing sector. Some of which include reduction of income tax rate to 25 per cent for MSME companies having turnover up to Rs 50 crore (US\$ 7.5 million), MAT credit carry forward extended to 15 years from 10 years and abolishment of Foreign Investment Promotion Board (FIPB) by 2017-18.
- The Union Cabinet has approved the Modified Special Incentive Package Scheme (M-SIPS) in which, proposals will be accepted till December 2018 or up to an incentive commitment limit of Rs 10,000 crore (US\$ 1.5 billion).
- The Government of India has removed the 12.5 per cent excise duty and 4 per cent special additional duty (SAD) on the manufacturing of point-of-sale (PoS) machines till March 31, 2017, which is expected to give a boost to the cashless economy as more PoS machines will be deployed in the future.
- The National Institution for Transforming India (NITI Aayog), after its recent push for Rs 6,000 crore (US\$ 900 million) textile sector package, aims to persuade the Government for similar support in the manufacturing sectors with large-scale employment generation opportunities, such as electrical and electronics engineering, footwear and light manufacturing segments, which also have export potential.
- The Ministry of Labour and Employment plans to relax compliance measures for MSMEs by exempting them from inspections related to key labour laws in order to encourage entrepreneurs to help promote manufacturing in India.
- The Government of India plans to give a big boost to local manufacturing by introducing the new 'Make in India green channel', which will reduce the time taken for cargo clearance at ports from about a week to a few hours without any upfront payment of duties.
- Gujarat government is planning to set up an electronics products manufacturing hub in the state, through its newly announced Electronics Policy 2016, which will generate about 500,000 jobs in the electronics sector in the next five years.
- The Ministry of Heavy industries and Public Enterprises, in partnership with industry associations, has announced creation of a start-up centre and a technology fund for the capital goods sector to provide technical, business and financial resources and services to start-ups in the field of manufacturing and services.
- NITI Aayog plans to release a blueprint for various technological interventions which need to be incorporated by the Indian manufacturing economy, with a view to have a sustainable edge over competing neighbours like Bangladesh and Vietnam over the long term.
- Ms Nirmala Sitharaman, Minister of State (Independent Charge) for Commerce and Industry, has launched the Technology Acquisition and Development Fund (TADF) under the National Manufacturing Policy (NMP) to facilitate acquisition of Clean, Green and Energy Efficient Technologies, by Micro, Small & Medium Enterprises (MSMEs).
- The Government of India has asked New Delhi's envoys in over 160 countries to focus on economic diplomacy to help government attract investment and transform the 'Make in India' campaign a success to boost growth during the annual heads of mission's conference. Prime Minister, Mr Modi has also utilised the opportunity to brief New Delhi's envoys about the Government's Foreign Policy priority and immediate focus on restoring confidence of foreign investors and augmenting foreign capital inflow to increase growth in manufacturing sector.
- The Government of Uttar Pradesh has secured investment deals valued at Rs 5,000 crore (US\$ 741.2 million) for setting up mobile manufacturing units in the state.
- Government of India has planned to invest US\$ 10 billion in two semiconductor plants in order to facilitate electronics manufacturing in the country.
- Entrepreneurs of small-scale businesses in India will soon be able to avail loans under Pradhan Mantri MUDRA Yojana (PMMY). The three products available under the PMMY include: Shishu - covering loans up to Rs 50,000 (US\$ 735), Kishor - covering loans between Rs 50,000 (US\$ 750) to Rs 0.5 million (US\$ 7,500), and Tarun - covering loans between Rs 0.5 million (US\$ 7,500) and Rs 1 million (US\$ 15,000).

## ISSUES AND CHALLENGES

We may claim that India is overtaking China as the world's fastest growing major economy, and the fact that rising wages across the Himalayas spell opportunities for a Make In India surge in local factories. However, the scenario is more complicated than that. There are five major challenges that loom for Modi's mission that are not easy to surmount. And that might mean a baptism by fire. They are explained below

1. **SHORTAGE OF FUNDS** – India needs funds to build industries, which in turn need infrastructure, which is in itself in short supply and requires more finance. The Make In India week is happening at a time the Supreme Court wants to know about the pile-up of bad loans in India's banking system which is not in a position to lend much unless its balance sheets are cleared. State-controlled banks are neck-deep in losses after making provisions to cushion bad loans. If the government pumps in more to save them, it would have less to spend on infrastructure. India's bad loans total R 443,000 crore, most of it from the

corporate sector, which is hardly in a position to take up massive investments. That would leave foreign direct investment (FDI) as the best bet, but that cannot come in big doses unless other issues are resolved, especially in the ease of doing business. A bankruptcy law to enable smoother shut-down of companies is yet to be passed. The government is said to be wooing oil-rich Gulf countries to participate in the R 40,000-crore National Investment and Infrastructure Fund. Amid a global fall in oil prices, there may be caution all around. Most of the investment projections being made are considering a longer term.

2. **TECHNOLOGICAL ISSUES** – Technology is changing at an alarming rate. There is a talk about Robots, who will replace human beings. Vivek Wadhwa, Stanford University fellow who is at the forefront of alerting the world on the robotic threat, told the BBC recently that it was now “indisputable” that a new kind of industrial revolution was in the offing – one that won’t require many humans. He mentioned that in a decade or two robots and artificial intelligence can do almost every job that human beings do and we are heading into a jobless future. It is really scaring. Just think of Google’s self-driving cars – and the fact that your smartphone is now good enough to be an ECG machine on the basis of an application. There is small consolation that some jobs may be had in making robots. Tata Motors is perfecting one, expected in under two months.
3. **WORKERS UNION BACKED BY POLITICAL PARTIES** – Unlike in China, where a communist government can (strangely) keep workers in control and wage costs in check, India has labour laws and organised unions that can hinder smooth expansion. It is not easy for the Modi government to change laws to make a dramatic impact. The major political parties like Congress, Communist, BJP are controlling different Unions, which may hinder the progress. The recent strikes in Maruti, Nokia, Ford and Hyundai are examples to prove the point.
4. **LACK OF SKILLED WORKERS:** The government’s Economic Survey said last year that the skilled workforce in India is counted at a mere 2%, while the NSDC estimated a need for 120 million skilled people in the non-farm sector– which would make it 10% of the population at current levels. Dearth of vocational education facilities and lack of training facilities are a key part of India’s industrial landscape. A report by consulting firm Ernst & Young said in 2012 that India lags far behind other nations in imparting skills training to its workers. Not too much has changed since then. While engineering colleges mushroom, the same cannot be said of industry-specific technical skills for shop floors. A major effort has got underway under the National Skill Development Corporation (NSDC), but this needs time to develop.
5. **NEED TO INCULCATE RESEARCH:** India’s industry has grown over the past six decades either through pampered public sector companies or through domestic industries enjoying access to a market protected by customs duties. Long-term competitiveness now required in an open global environment needs huge investments in research and development. While India is home to R&D facilities for many global companies, Indian companies have been slow to embrace R&D. Groups like the Tatas and Mahindras are bucking the trend now, but they are toddlers in a global landscape. Indian companies now need to dovetail their efforts with the state-run Council of Scientific and Industrial Research, which has historically led R&D in India with its 38 national laboratories and more than 13,000 scientific personnel.

## CONCLUSION

If we really want to make India a global manufacturing hub as per the vision of the present Government, we need to display to the world our strengths of being sincere, hardworking, excellence in computers and changed mind set. In order to become the Best in the World, we need to be aligned to the best manufacturing practices followed by companies worldwide. The aim is firstly to establish a manufacturing system without wastes, without losses and without any Human Errors. Secondly to treat uniformly all persons and engage them in problem solving with an intention of Continuous Improvement. Further we need to create a team work atmosphere and ever learning organization. For this we need competent leaders, who understand problems; see the need of nurturing people and those are not only good in management issues but also good in Engineering / Technical issues and in the art of problem solving. We need to have new processes, new infrastructure, new sectors, new mindset, zero defect zero effect attitude with high-quality manufacturing standards while minimizing environmental and ecological impact.

## REFERENCES

1. <http://economictimes.indiatimes.com/wealth/personal-finance-news/government-eases-fdi-norms-for-construction-sector/articleshow/49739407.cms>
2. <http://trak.in/tags/business/2014/11/13/indian-railways-100-fdi/>
3. [http://www.business-standard.com/article/economy-policy/make-in-india-the-story-so-far-116021200338\\_1.html](http://www.business-standard.com/article/economy-policy/make-in-india-the-story-so-far-116021200338_1.html)
4. <http://www.makeinindia.com/home>
5. <http://www.mapsofindia.com/government-of-india/make-in-india.html>
6. [http://www.mitsom.edu.in/Downloads/Vihaan%20Annual%20Magazine%202015\\_Updated.pdf](http://www.mitsom.edu.in/Downloads/Vihaan%20Annual%20Magazine%202015_Updated.pdf)
7. <http://www.thehindu.com/news/national/modi-reviews-fdi-policy/article8751860.ece>
8. <http://www.zed.org.in/>

## A REVIEW OF CORPORATE SOCIAL RESPONSIBILITY IN INDIA

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**ABSTRACT**

*As per the new Companies Act 2013, corporate social responsibility is emerging as a catalyst in socio economic development of the country. Due to the provisions of corporate social responsibility, it is evolving as a new tool of social development. The practices and initiatives taken by corporate to develop the Indian society is making a robust change and it can be seen around us. This paper is an attempt to identify the outcomes, issues and challenges of corporate social responsibility.*

**KEYWORDS**

corporate social responsibility, philanthropic, challenges, retention efforts.

**INTRODUCTION**

Corporate Social Responsibility (CSR), also referred to as corporate citizenship or socially responsible business, is a form of corporate self-regulation integrated into a business model. The interest in CSR has grown with the spread of socially responsible investing, the attention of nongovernmental organizations (NGOs), and ethics training within organizations. Recent incidents of ethics-based corporate scandals have also increased awareness of CSR. Organizations that embrace CSR hold themselves accountable to others for their actions and seek to make a positive impact on the environment, their communities, and the larger society.

Corporate social responsibility may include philanthropic efforts such as charitable donations or programs that encourage employee volunteerism by providing paid time off for such activities. Many organizations seek to have an even greater impact through CSR initiatives that integrate social values into operational and business strategies. For example, to protect scarce natural resources, a firm may make a commitment to use only recycled materials in its packaging of consumer goods.

Many organizations promote their CSR efforts as a way of shaping public perceptions, attracting customers, and building good will with stakeholders. Public companies often report CSR policies and activities in their annual reports; some create separate documents or use their websites to describe and publicize their CSR-related efforts. Organizations and interested external third parties assess CSR performance by comparing, or benchmarking, the activities and their results with competitors or other sets of organizations. Measures include amount of expenditures or investment, degree of executive engagement, impact of implementation, and CSR outcomes relative to objectives. The scale and nature of the benefits of CSR to an organization can be difficult to quantify. Those driven by strategic and operational choices may result in higher or lower costs, but directly linking CSR initiatives to revenue increases is not always possible. Many organisations use non-financial measures to assess the benefits of CSR. For example, socially responsible practices can improve employee recruitment and retention efforts, be a means of managing risk, and provide brand differentiation. Some business critics of CSR, however, argue that too often it competes with a duty to maximize shareholder value. Others cast the CSR efforts of companies as "greenwashing" efforts to draw attention away from unpopular practices such as polluting the environment or outsourcing jobs overseas.

**OBJECTIVES**

1. To study the CSR status in India.
2. To understand the meaning and various models of CSR.
3. To study the policies governing CSR in India.
4. To study the challenges faced by CSR in India.
5. To make suggestions for accelerating CSR initiatives.

**RESEARCH METHODOLOGY**

The research paper is an attempt of exploratory research, based on the secondary data sourced from journals, magazines, articles and media reports.

**DEFINITION OF CORPORATE SOCIAL RESPONSIBILITY**

Corporate Social Responsibility (CSR) is a concept whereby companies integrate social, environmental and health concerns in their business strategy (policy) and operations and in their interactions with stakeholders on a voluntary basis. The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time.

The European Commission's definition of CSR is: "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." According to CSR Asia, "CSR is a company's commitment to operating in an economically, socially and environmentally sustainable manner whilst balancing the interests of diverse stakeholders." Today the concept of CSR has undergone radical change. It has integrated social as well as environmental issues into their missions and decisions. Companies take keen interest in informing about their CSR activities to their stakeholders as well. Across the globe, business enterprises have undertaken CSR initiatives in the areas of water conservation, healthcare, rural welfare, environment protection, poverty alleviation, education, community investment projects, culture and heritage, bio-diversity, disaster management and relief, culture and heritage, green environment, product responsibility, governance, waste management and gender equality. use CSR to integrate economic, environmental and social objectives with the company's operations and growth."

**CSR IN INDIA**

CSR is not a new concept in India. Ever since their inception, corporates like the Tata Group, the Aditya Birla Group, and Indian Oil Corporation, to name a few, have been involved in serving the community. Through donations and charity events, many other organizations have been doing their part for the society. The basic objective of CSR in these days is to maximize the company's overall impact on the society and stakeholders. CSR policies, practices and programs are being comprehensively integrated by an increasing number of companies throughout their business operations and processes. A growing number of corporates feel that CSR is not just another form of indirect expense but is important for protecting the goodwill and reputation, defending attacks and increasing business competitiveness.

Companies have specialized CSR teams that formulate policies, strategies and goals for their CSR programs and set aside budgets to fund them. These programs are often determined by social philosophy which have clear objectives and are well defined and are aligned with the mainstream business. The programs are put into practice by the employees who are crucial to this process. CSR programs ranges from community development to development in education, environment and healthcare etc.

CSR has gone through many phases in India. The ability to make a significant difference in the society and improve the overall quality of life has clearly been proven by the corporates. Not one but all corporates should try and bring about a change in the current social situation in India in order to have an effective and lasting solution to the social woes. Partnerships between companies, NGOs and the government should be facilitated so that a combination of their skills such as expertise, strategic thinking, manpower and money to initiate extensive social change will put the socio-economic development of India on a fast track.

### NEED FOR CORPORATE SOCIAL RESPONSIBILITY IN INDIA

CSR as a strategy is becoming increasingly important for India today because of three identifiable trends:

1. **Changing social expectations:** Consumers and society in general expect more from the companies whose products they buy.
2. **Increasing affluence:** This is true within developed nations, but also in comparison to developing nations. Affluent consumers can afford to pick and choose the products they buy.
3. **Globalization:** Growing influence of the media sees any mistakes by companies brought immediately to the attention of the public.

### POTENTIAL BUSINESS BENEFITS OF CSR

The nature of benefits of CSR for any organization can vary depending on the nature of the enterprise. The business case for CSR within a company will likely rest on one or more of these arguments.

#### 1. HUMAN RESOURCES

A CSR programme can be an aid to recruitment and retention, particularly within the competitive graduate student market. Potential recruits often ask about a firm's CSR policy during an interview, and having a comprehensive policy can give an advantage.

#### 2. RISK MANAGEMENT

Managing risk is a central part of many corporate strategies. Reputation as take decades to build up can be ruined in hours through incident such as corruption scandals or environmental accident. These can draw unwanted attention from regulators, courts, governments & media. Building a genuine culture of doing the right thing within a corporation can offset these risk.

#### 3. BRAND DIFFERENTIATION

In crowded market places, company's striving for a unique selling proposition. That can separate them from the competition in the minds of consumers. CSR can play role in building customer loyalty based on distinctive ethical values.

#### 4. LICENSE TO OPERATE

Corporation are keen to avoid interference in their business through taxation. By taking substantive voluntary steps, they can pursue governments that they are taking issues such as health & safety, diversity, or the environment seriously as good corporate citizen for positive impact on the environment.

CSR have no boundaries and are not constrained by race, color, or religion. Sadly, concern for the community is often mistaken for socialism. On the contrary, every citizen is an asset in economic activity and has opportunities to succeed. CSR is a culture and unwritten contract with the community. This invisible culture can shape brighter future for nations. If employees don't see the point of CSR initiatives, or understand the message, initiatives are unlikely to be effective. Organizations must realize that government alone will not be able to get success in its endeavor to uplift the down trodden of society. The present societal marketing concept of companies is constantly evolving and has given rise to a new concept- CSR. Many of the leading corporations across the world had realized the importance of being associated with socially relevant causes as a means of promoting their brands. It stems from the desire to do well and get self-satisfaction in return as well as societal obligation of business. The Indian corporate sector is planning to introduce CSR in the small and medium enterprises (SME) sector to increase its reach in remote areas. Also some companies have already started using the CSR as a strategy, which aims at mutual development of company and the community simultaneously

### SUGGESTIONS

Companies can set a network of activities to be taken up in a consortium to tackle major environmental issues. It would also provide an opportunity to learn from each other. Everyone in the organization needs to recognize their own role in promoting CSR. Companies should provide wider professional development activities. Training, conferences and seminars could be organized by companies to disseminate and generate new knowledge and information in this sector. A strong budgetary support would definitely help to grow this sector and research related to respective industry would enhance their organizations contribution further. Government regulations which are supporting in this direction could attract more response from organizations. All this would also lead to benchmark CSR activities. Companies need to involve their stakeholders in order to build meaningful and long term partnerships which would lead to creating a strong image and brand identity. It is also suggested to review existing policies in order to develop more meaningful visions for the companies and broaden their contributions to reach to local communities.

### CONCLUSIONS

Corporate sustainability is an evolving process and not an end. The Companies bill is a good initiative on the part of the government however what would be included in spending on CSR is unclear and is left for the companies to decide. Across the globe, the concept of CSR has been accepted as an element for success and survival of business along with fulfilling social objectives. However, the challenge for the companies is to determine a strong and innovative CSR strategy which should deliver high performance in ethical, environmental and social areas and meet all the stakeholders' objectives.

### REFERENCES

1. Chappel, M. and Moon, J. (2005), "Corporate Social Responsibility (CSR) in Asia: A Seven country study of CSR", Business and Society, 44 (4), pp 415-441.
2. Das Gupta A (ed) (2010) Ethics, business and society
3. Kumar, R., D.F. Murphy and V. Balsari (2001) Altered Images: The 2001 state of corporate social responsibility in India poll, New Delhi: TERI-India.
4. Mohan, A. (2001) 'Corporate Citizenship: Perspectives from India', Journal of Corporate Citizenship, Sheffield: Greenleaf Publishing.

#### WEB SOURCES

5. <http://www.articlesnatch.com/Article/Corporate-Social-Responsibility-Trends-In-India/768547#.UNyDxqyI5ko>
6. <http://www.csrtimes.com/community-articles/why-india-needs-aggressive-csr-implementation/eFVPkxHMIIn>
7. <https://www.boundless.com/management/textbooks/boundless-management-textbook/ethics-in-business-13/corporate-social-responsibility-98/introduction-to-corporate-social-responsibility-458-10562/>

## CUSTOMER DISSATISFACTION: AN EXPLORATION OF THE CONSTRUCT

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## ABSTRACT

*Customer acquisition is critical in the early stages of start-up businesses, but once the business has built a customer base, its sustainability becomes the most critical issue for the business. The more customer one has, the more important customer sustainability is. In regard to customer sustainability, the Pareto principle, also known as the 80–20 rule, states that, “roughly 80% of a company’s future revenue will come from just 20% of its existing customers.” In the grand scheme of things, it’s common for customers to not provide feedback. Firms are then left to wonder whether their products and services are being received positively or negatively. Such valuable piece of information comes from the opportunity the businesses provide its customers to express their opinions and experiences. Give their customers the chance to rant, complain, congratulate, praise and suggest ways to improve. The primary objective of the study is to gain deep insights into the construct ‘customer dissatisfaction’ and thereby highlighting the role of inducing complaints/suggestions from satisfied/dissatisfied customers in customer as well as business sustainability, using various literature surveys from the beginning of the study. The idea here is to investigate the various themes and components related to customer dissatisfaction. Also based on the analysis and understanding of the literature, the secondary objective is to present a model for post-purchase consumer processes. The research design to gain insights into the same was chosen to be exploratory which consisted of extensive literature review and seeking expert advice by way of in depth interview of the experts. On the basis of such analysis, it has been concluded that not only satisfied customers can add to customer equity of a firm but a dissatisfied customer can also be moulded to add to the customer equity. This can be made possible by listening to their grievances, inducing them to complain about dissatisfaction if any, satisfactorily resolving their complaints, making them alternative ways available to reach retailer in case complaints not satisfactorily resolved etc. This highlights the vitality of customer complaint handling mechanism’s adoption in customer sustainability in the firm. Since it is an exploratory study its results cannot be generalised, for that one needs to carry out a conclusive research.*

## KEYWORDS

customer dissatisfaction, complaint handling mechanism, venting of frustration, post purchase consumer model.

## 1. INTRODUCTION

In the face of rising competition and/or maturing industries or shrinking markets acquisition of new customers is becoming increasingly difficult. The cost of generating a new customer can substantially exceed the cost of retaining a present customer. This is so because of low growth and highly competitive markets in most of the industries. So the question is what should be done by the marketers in order to survive, in the phase of maturing industries? The only answer to this question is that in order to survive a firm need to retain its existing customer base so that if they are not able to attract new customers, at least they do not lose its existing customers to others in the market. Traditionally, Successful marketing strategy generally depends on the firm's ability to identify and influence the flows of customers into and out of the market. These flows consist of (1) additional customer entry to the market, (2) brand shifting, (3) customer market exit, and (4) changes in purchase frequency. Firms seek to control these four customer flows because they are the ultimate determinants of growth, stagnation, or decline. The marketing literature emphasizes strategies designed to obtain additional customers, encourage brand switching, and increase purchase frequency (Fornell and Wernerfelt 1987). In regard to the same, marketing firms have traditionally been interested in customer satisfaction, and with good reason. Customers continue to purchase those products with which they are satisfied, and in telling others about particularly pleasing products, they may influence the brand perceptions of those with whom they communicate. On the other hand, potential responses by dissatisfied customers like (a) switching brands, (b) making a complaint to the seller or to a third party, and (c) telling others about the unsatisfactory product or retailer can have significant impact on the firm's image which is very difficult to bear, by the firms specially in the phase of maturing industries, wherein firms cannot afford to lose its customers as it is already difficult to attract new customer in the market. So the need of the hour is to give more focus on customer dissatisfaction than merely customer satisfaction.

To begin with, **Customer dissatisfaction** can be defined as a mild, negative affective reaction resulting from an unfavourable appraisal of a consumption outcome. Philip Kotler defined dissatisfaction as “If a product matches expectations, the consumer is satisfied; if it falls short, the consumer is dissatisfied.” Oliver stated it as “A judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfilment.” The theory of disconfirmed expectations given by Leon Festinger states that consumers enter into a consumption experience with predetermined cognitive expectations of a product's performance. These expectations are used as a type of benchmark against which the actual performance perceptions are judged and when the performance perceptions do not meet expectations it leads to dissatisfaction.

With a brief discussion about the literature reviewed on customer dissatisfaction and how the focus of research interests shifted from the study of customer satisfaction to customer dissatisfaction over a period of time, the paper moves on to a discussion of research objective and research design used in the study for carrying out the review work. The various research papers relating to customer behaviour and sustainability were analysed then to find out the theme related to customer dissatisfaction. The key components were found out then to analyse which variables is mostly used in the literature. Also, an interesting matchup so as to collate the actual moot areas and the areas in which actual research works are being initiated, was studied in the next stage and finally a customer post purchase processes model was framed based on the analysis of the study in the concluding part. Finally, the limitation and future research directions of the study were suggested.

## 2. LITERATURE REVIEW

No satisfactory literal definition has yet been developed for consumer satisfaction or dissatisfaction in the literature of marketing. The Random House Dictionary states: “dissatisfaction results from contemplating what falls short of one's wishes or expectations.” Consumer dissatisfaction, then, might be measured by the degree of disparity between expectations and perceived product performance. Buskirk and Rothe go so far as to say: “It is this sense of frustration and bitterness on the part of consumers who have been promised much and have realized less, that may properly be called the driving force behind consumerism.” Marketing firms have traditionally been interested in customer satisfaction, because it is generally assumed to be a significant determinant of repeat sales, positive word-of-mouth, and consumer loyalty. Customers continue to purchase those products with which they are satisfied, and in telling others about particularly pleasing products, they may influence the brand perceptions of those with whom they communicate. However potential responses by dissatisfied customers include (a) switching brands or refusing to repatronize the offending store, (b) making a complaint to the seller or to a third party, and (c) telling others about the unsatisfactory product or retailer. The potential impact of these responses on a firm can be significant. One nationwide study (Technical Assistance Research Programs 1979) reported that depending on the nature of the dissatisfaction, from 30 to over 90% of dissatisfied respondents did not intend to repurchase the brand involved. Data reported by Diener and Greyser (1978) indicated that 34% of those dissatisfied with a personal care product told others about their dissatisfaction. If the number of consumers experiencing dissatisfaction is high enough, such responses may have lasting effects in terms of negative image and reduced sales for the firm.

Generally, a complaint is said to be an expression of dissatisfaction made to an organisation, related to its products or services, or the complaints handling process itself, where a response or resolution is explicitly or implicitly expected. However, not all customers who get dissatisfied complain to retailer. Some generalizations



that have emerged from research on consumer complaining include: those who complain when dissatisfied tend to be members of more upscale socioeconomic groups than those who do not complain (Warland, Herrmann and Willits 1975); Personality characteristics, including dogmatism, locus of control, and self-confidence, are only weakly related to complaint behaviour, if at all (Settle and Golden 1974, Zaichkowsky and Liefeld 1977); The severity of the dissatisfaction or problems caused by the dissatisfaction is positively related to complaint behaviour (Lawther, Krishnan and Valle 1979; Swan and Longman 1973); The greater the blame for the dissatisfaction placed on someone else than the one dissatisfied, the greater the likelihood of complaint action (Lawther, Krishnan and Valle 1979; Valle and Koeske 1977); The more positive the perception of retailer responsiveness to customer complaints, the greater the likelihood of complaint action (Grabick 1980; Granbois, Summers and Frazier 1977).

Consumer complaints are very useful forms of consumer-initiated market information that can be used to make strategic and tactical decisions (Kasouf et al., 1995). Appropriate responses to complaints can prevent customers from switching (Fornell and Wernerfelt, 1987). Plymire (1991) observed that "the surest road to a customer-focused culture is through increased complaints". The indirect benefits of complaining noted above occurs when an unhappy customer complains, which then leads the marketer to respond in a way that makes the customer less dissatisfied in the future.

Another benefit of complaining is that it gives dissatisfied consumers a chance to vent their unhappiness (Kolodinsky and Aleong, 1990; Kowalski, 1996; Richins, 1980). This assertion was empirically supported by the findings of Alicke et al. (1992) who found that the most common reason for complaining in social interactions was to vent negative emotions. Oliver (1987) suggested that complaining reduces dissonance caused by dissatisfaction. Halstead and Page (1992) argued that such complaining induced dissonance reduction, was responsible for the positive relationship between complaining and repurchase intention in the TARP (1979) studies. Individuals under stress tend to experience a subjective sense of something being bottled up (Stiles, 1987). When such individuals suppress expressing their feelings of distress, it causes them to dwell on the causes of their dissatisfaction, which could then result in increased dissatisfaction (Kowalski, 1996; Kowalski and Erickson, 1997). Failure to confide in others about traumatic events has been found to be associated with increased stress and long-term health problems (Pennebaker and Beall, 1986; Pennebaker et al., 1987). Kowalski et al. (1996) has found evidence for the beneficial effects of complaining that low propensity complainers felt better about a source of dissatisfaction after they had expressed their dissatisfaction. Similarly, in a study using student as subjects evaluating a computer to be purchased by their university, it was found that subjects who complained experienced lower levels of dissatisfaction (Nyer, 1999).

While some complaining may be aimed at seeking redress or warning potential customers (Day, 1980), other complaints, especially negative word-of-mouth, are motivated by the desire to obtain emotional release (Alicke et al., 1992; Stilwell and Salamon, 1990). The desire to vent frustration was the most commonly reported reason for complaining in social interactions (Alicke et al., 1992). Data quoted by Adamson suggest that dissatisfied customers tell twice as many people of their experience than satisfied customers.

Despite this, there is very little empirical evidence for the effectiveness of venting in reducing dissatisfaction among real consumers in real consumption situations. On the other hand, Good complaint handling is not only must for good marketing but may also be construed as a legal requirement. The fundamental objective of consumer law is to protect the public from defective products and unscrupulous manufacturers, and as a means by which the consumer can obtain suitable compensation or redress. Thus, effective and fair handling of consumer complaints is a statutory requirement. In effect, satisfying a customer under this philosophy may indeed prevent expensive law suits.

Typically, consumer affairs departments seek to improve relations with the consuming public, and to make firms more responsive to the needs and grievances of consumers (Blum, Stewart, and Wheatly 1974). By representing consumer interests in corporation decision making, these units offer potential for improving the satisfaction of consumers in the marketplace. Beyond these societal benefits, consumer affairs units also offer significant opportunities for improving marketing effectiveness. Among these opportunities is strengthened brand loyalty and reduced brand shifting (Fornell 1981), improved marketing intelligence, additional promotional strategies, ideas for new products, and improved image and trade relations (Grainer, McEvoy, and King 1979).

It is seen, once a customer lodges a complaint, the original transaction may become less relevant to the consumer's ultimate satisfaction than events that follow the complaint. TARP's research across industries has shown that even customers with problems can be retained if their complaints are handled effectively; indeed, many of these customers become as loyal as those who had no problems with the firm at all. TARP also presented that complaining customers showed stronger brand loyalty than customers who did not complain and that loyalty could be strengthened further by the firm's complaint handling.

While consumer affairs units have sometimes been successful in obtaining prompt and equitable redress for those who complain (Grainer, McEvoy, and King 1979), there nevertheless remains appreciable consumer dissatisfaction with goods and services, much of which is never voiced to the seller. Apparently, consumer affairs units have been largely unable to mobilize corporate resources to eliminate or modify the organizational practices that give rise to the discontent, thus allowing perpetuation of the problems causing dissatisfaction (Grainer, McEvoy, and King 1979).

Service recovery policies involve actions taken by service providers to respond to service failures (Gronroos, 2000). Both, what is done (e.g. restitution and compensation) and how it is done (i.e. employee interaction with the customer) influence customer perceptions of service recovery (e.g. Andreassen, 2000; Levesque and McDougall, 2000). Justice theory appears to be the dominant theoretical framework applied to service recovery (Tax and Brown, 2000).

In some instances, loyal customers can take extreme actions to hurt the firm, and thereby become its worst enemies. In fact, practitioner surveys on customer rage (Customer Care M&C 2005), anecdotes in the business press (The Economist 2006) and the abundance of customer advocacy websites (Yahoo! 2007) suggest that customer retaliation is becoming prevalent in today's society. Researchers have argued that strong relationships can amplify customers' unfavourable responses to negative service encounters (Bhattacharya and Sen 2003; Grégoire and Fisher 2006; Hess et al. 2003; Mattila 2001, 2004; Tax et al. 1998).

### 3. RESEARCH OBJECTIVES

The primary objective of the study is to gain deep insights into the construct 'customer dissatisfaction', using the various literature surveys from the beginning of the study. The idea here is to investigate the various themes and components related to customer dissatisfaction. Also based on the analysis and understanding of the literature, the secondary objective is to present a model for post-purchase consumer processes.

### 4. METHODOLOGY

The research design to gain insights into customer dissatisfaction is chosen to be exploratory. For the purpose of fully understanding the construct an extensive exploratory research was carried out. All the research papers that appeared on the theme of customer dissatisfaction were collected from different data sources like WILEY, JSTOR, Emerald, SAGE etc. from 1973 onwards to 2014. A total of 21 research papers were selected for the study and were analysed to explore the various themes, components or dimensions relating to the concept of customer dissatisfaction.

### 5. CUSTOMER DISSATISFACTION: THEMES

Growing recognition of consumer dissatisfaction as a critical construct in marketing and consumer behaviour has generated substantial research interest in the academic world, many research papers and books were published on the same. The themes of those papers are listed in Table 1 below.



TABLE 1: THEMES ON CUSTOMER DISSATISFACTION

Susan M. Keaveney (1995)	This study talks about Customer switching behaviour which in turn damage market share and profitability of the firms.
Marsha L. Richins (1983)	It examines the correlates of one possible response of dissatisfied customer i.e. telling others about the dissatisfaction.
Alireza Rezghi Rostami Changiz Valmohammadi Jahan Yousefpoor (2014)	It revealed that the four factors of CRM system, i.e. service quality, service characteristics, level of service access, and handling complaints have a positive effect on customer satisfaction.
Prashanth U. Nyer (2000)	This study advocates the role of consumer complaints as a useful source of information that helps marketers identify areas of dissatisfaction.
Cathy Goodwin Ivan Ross (1990)	It suggests that theories of procedural fairness can offer insights into the effectiveness of complaint-handling strategies. Equity theory is presented in the context of complaint-handling.
Mark D. Alickie et al	It states that complaints can also be non-instrumental in nature and are registered for the purpose of venting their frustration.
Yany Grégoire & Robert J. Fisher (2007)	This study unveiled that betrayal is a key motivational force that leads customers to restore fairness by all possible means, including retaliation.
V.-W. Mitchell (1993)	This study highlights that effective complaint handling is must in order to survive and enhance market share in the scenario of saturated markets.
Jan Keitzmann and Ana Canhoto (2013)	This study aims at developing a better understanding about negative e-WOM and its management.
Phillip K., Hellier Gus M., Geursen Rodney A., Carr John A. & Rickard (2003)	This paper develops a general model on repurchase intention of the consumer with special reference to service quality, equity, customer satisfaction, past loyalty, expected switching cost and brand preference.
Rolph E. Anderson (1973)	The study reveals that too great a gap between high consumer expectations and actual product performance may cause a less favourable evaluation of a product than a somewhat lower level of disparity.
Banwari Mittal & Walfried M. Lassar (1998)	This paper addresses the dynamics of relationship between customer satisfaction and customer loyalty which in turn resulted in an asymmetrical relation i.e. while dissatisfaction nearly guarantees switching, satisfaction does not ensure loyalty.
Jochen Wirtz & Anna S. Mattila (2004)	It revealed that recovery outcomes (e.g. compensation), procedures (e.g. speed of recovery) and interactional treatment (e.g. apology) have a joint effect on post-recovery satisfaction. This study emphasise on justice theory.
William O. Bearden and Jesse E. Teel (1983)	The research conducted a two-phase study of consumer experiences to examine the antecedents and consequences of consumer satisfaction. It suggested that complaint activity must be included in satisfaction/ dissatisfaction research.
Claes Fornell and Birger Wernerfelt (1987)	The study developed an economic model of defensive marketing strategy for complaint management. The authors show that defensive marketing (e.g., complaint management) can lower the total marketing expenditure by substantially reducing the cost of offensive marketing (e.g., advertising).
Mohamed Zairi (2000)	This paper addresses the issue of complaints handling and management as essential for achieving customer retention and loyalty. It tried to produce an audit tool for developing a culture which is not averse to handling complaints.
Alan R. Andreasen (1977)	The study gives the taxonomy of consumer satisfaction/dissatisfaction measures. This paper has given a model describing post purchase consumer processes.
Schibrowsky, John A., and Richard S. Lapidus. (1994)	Many firms have developed programs to handle individual complaints, few have implemented programs to analyze aggregate complaints over time. This study attempts to fill that void and outline a method to analyze and manage aggregate complaints.
Gruber, Thorsten, Isabelle Szmigin, and Roediger Voss. (2009)	This paper seeks to explore the nature of complaint satisfaction with particular emphasis on the qualities and behaviours that male and female customer value during personal complaint-handling service encounters.
Levesque, Terrence J., and Gordon HG McDougall. (1996)	The research suggests that customers are more likely to voice than exit when they encounter problem. It has tried to link the importance of the problem to the rate of taking action (voicing and exit).
Claes Fornell and Robert A. Westbrook (1984)	This paper suggests a process whereby increasing consumer complaint proportions leads to organizational suppression of the unit receiving the complaints, which subsequently contributes to a further increase in complaints due to inaction by marketing management.

Source: compiled by the author

As can be seen from the above themes that were found to exist on 'customer dissatisfaction', it was evaluated that studies related to behavioural aspects of consumers towards unsatisfactory products/services are mostly covered by the researchers. Most of the studies try to highlight the significance of complaint handling mechanism in dealing with dissatisfied customers. They also tried to emphasise its role in enabling venting of frustration caused by unsatisfactory product/service, thereby decreasing customer dissatisfaction. Some studies tried to relate the notion of locus of control with the customer complaining behaviour while other studies examined the gender attitudinal difference towards the nature of complaint satisfaction with particular emphasis on the qualities and behaviours that male and female customer value during complaint-handling service encounters. Once the various themes pertaining to 'Customer Dissatisfaction' were studied, they were analysed to find out the similarities in the various themes and their components. The theme with similar variables used in the study were grouped together to understand it in a better way. The results of the same are provided in Table 2 below.

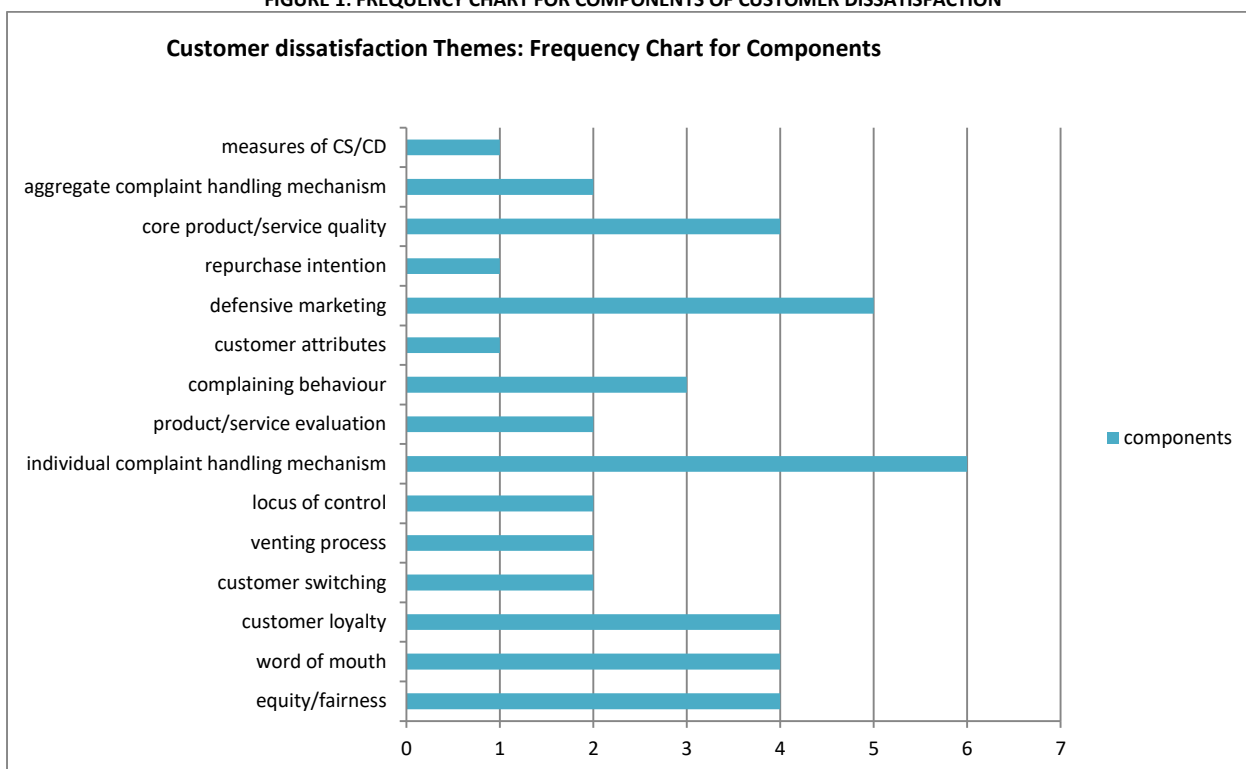
TABLE 2: ANALYSIS OF CUSTOMER DISSATISFACTION THEMES: IDENTIFICATION OF COMMONALITIES

COMPONENTS	SOURCE/YEAR	DEFINITION
Equity/fairness	Cathy Goodwin Ivan Ross (1990); Yany Grégoire & Robert J. Fisher (2007); Phillip K., Hellier Gus M., Geursen Rodney A., Carr John A., Rickard (2003); Jochen Wirtz & Anna S. Mattila (2004)	Equity refers to the quality of being fair and impartial to the customers in all aspects. It means fairness and impartiality towards all concerned, based on the principles of even-handed dealing. Equity implies giving as much advantage, consideration, or latitude to one party as it is given to another.
Word of mouth	Marsha L. Richins (1983); Yany Grégoire & Robert J. Fisher (2007); Jan Keitzmann and Ana Canhoto (2013); Jochen Wirtz & Anna S. Mattila (2004)	Word of mouth means an oral or written recommendation by a satisfied/dissatisfied customer to the prospective customers of a good or service. WOM can be positive as well as negative in form.
Customer loyalty	Susan M. Keaveney (1995); Phillip K. Hellier Gus M., Geursen Rodney A., Carr John A., Rickard (2003); Banwari Mittal, Walfried M. Lassar (1998); Mohamed Zairi (2000)	Customer loyalty refers to likelihood of previous customers to continue to buy from a specific organisation. It is both an attitudinal and behavioural tendency to favour one brand over all others, whether due to satisfaction with the product or service, its convenience or performance, or simply familiarity and comfort with the brand.
Customer switching	Susan M. Keaveney (1995); Banwari Mittal, Walfried M. Lassar (1998)	Consumer-switching behaviour refers to customers abandoning a product or service in favour of a competitor's product or service.
Venting process	Prashanth U. Nyer (2000); Mark D. Alickle et al	Venting refers to a forceful expression or release of pent-up thoughts or feelings
Locus of control	Marsha L. Richins (1983); Mark D. Alickle et al	Locus of control is a general dispositional bias and describe relatively stable differences those people who, at one extreme, believe that outcomes that accrue to them are the results of their own actions or disposition (internal locus of control) and, at the other pole, those people who believe that events that befall them are due to its extraneous forces and therefore beyond their control (so called external locus of control).
Individual Complaint handling mechanism	Susan M. Keaveney (1995); Marsha L. Richins (1983); Alireza Rezghi Rostami Changiz Valmohammadi Jahan Yousefpoor (2014); Cathy Goodwin Ivan Ross (1990); Mohamed Zairi (2000); Schibrowsky, John A., and Richard S. Lapidus. (1994)	Individual complaint handling mechanism refers to a formal arrangement made by the organisation whereby customer grievances will be heard and resolved. Since it is individual Complaint handling mechanism it aims at handling individual complaints.
Product/service evaluation	Rolph E. Anderson (1973); William O. Bearden and Jesse E. Teel (1983)	Product evaluation is a systematic determination of a product's merit, worth and significance, using criteria governed by a set of standards.
Complaining behaviour	Marsha L. Richins (1983); Alan R. Andreasen (1977); Levesque, Terrence J., and Gordon HG McDougall. (1996)	Complaining behaviour constitutes of the factors that induce a dissatisfied customer to complain about the dissatisfaction caused to him.
Customer attributes	Gruber, Thorsten, Isabelle Szmigin, and Roediger Voss. (2009)	Customer attributes refers to the distinctive qualities, features or characteristics possessed by different customers.
Defensive marketing	Prashanth U. Nyer (2000); Mark D. Alickle et al, William O. Bearden and Jesse E. Teel (1983); Claes Fornell and Birger Wernerfelt (1987); Claes Fornell and Robert A. Westbrook (1984)	Defensive marketing strategies refer to the actions taken by the marketer to protect his existing market share, profitability and product positioning against an emerging competitor.
Repurchase intention	Phillip K., Hellier Gus M., Geursen Rodney A., Carr John A. & Rickar (2003)	Repurchase intention signifies the subjective probability that a customer will continue to purchase a product/services from the same company.
Core Product/Service quality	Susan M. Keaveney (1995); Alireza Rezghi Rostami Changiz Valmohammadi Jahan Yousefpoor (2014); Phillip K., Hellier Gus M., Geursen Rodney A., Carr John A., Rickard (2003); & Rolph E. Anderson (1973)	Core product is a company's product or service which is most directly related to their core competencies. It refers to the use, benefit or problem-solving service that the consumer is really buying when purchasing the product.
Aggregate complaint handling mechanism	V.-W. Mitchell (1993); Schibrowsky, John A., and Richard S. Lapidus. (1994)	This is a step ahead individual complaint handling mechanism wherein all incoming complaints are recorded. The data so collected is then filtered to arrive at some significant conclusions about the type, causes etc of the complaints received. This is done in order to extract the full benefit from the complaint process.
Measures of CS/CD	Alan R. Andreasen (1977)	It refers to the factors that lead to customer satisfaction and dissatisfaction.

Source: Compiled by author

The above analysis is depicted in a form of a frequency chart below to examine the number of times the components are used in different studies.

FIGURE 1: FREQUENCY CHART FOR COMPONENTS OF CUSTOMER DISSATISFACTION

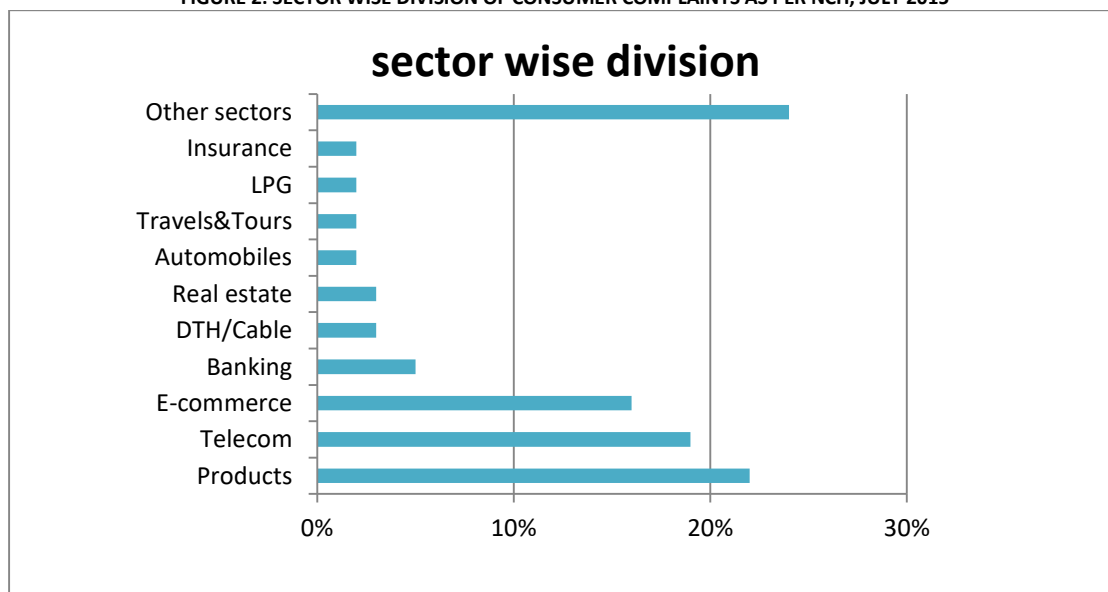


From the above figure, it is clear that most of the authors have tried to focus on core service/product quality as this is one of the basic antecedents in determining customer satisfaction or dissatisfaction while others have tried to highlight the role of complaint handling mechanism in an organisation. Some authors have tried to go beyond individual complaint handling mechanism that to aggregate complaint handling mechanism, thereby not only highlighting their vitality to a firm in tackling with dissatisfied customers, but also facilitating firms' defensive marketing strategies, as evident from above a large proportion of authors have proposed their studies on defensive marketing. Some studies signify that a dissatisfied customer is more likely to engage in word of mouth than a satisfied customer. Some studies emphasise the notion of equity/fairness in driving the customer satisfaction or dissatisfaction. They suggested that customers are likely to be more satisfied if they feel that they are being treated equally like other customers in all aspects. Few authors have given an attempt to determine customer complaining behaviour as not all customers who get dissatisfied complains. So they have tried to give certain factors that drive a dissatisfied customer to complain about the dissatisfaction to the retailer. Other studies have illuminated aspects like customer loyalty, customer retention, customer switching, customer repurchase intention etc.

## 6. COLLATION BETWEEN AREAS OF COMPLAINTS RECEIVED AND AREAS OF RESEARCHES INITIATED

The month of July 2015 saw National Consumer helpline handling 14,097 calls, which includes complaints registered on NCH Website as well as sms received. The NCH website has registered 5, 07,113 hits – this count is steadily increasing month on month. The sector wise classification of the complaints so received is depicted by the following graph:

FIGURE 2: SECTOR WISE DIVISION OF CONSUMER COMPLAINTS AS PER NCH, JULY 2015



Source: NCH website

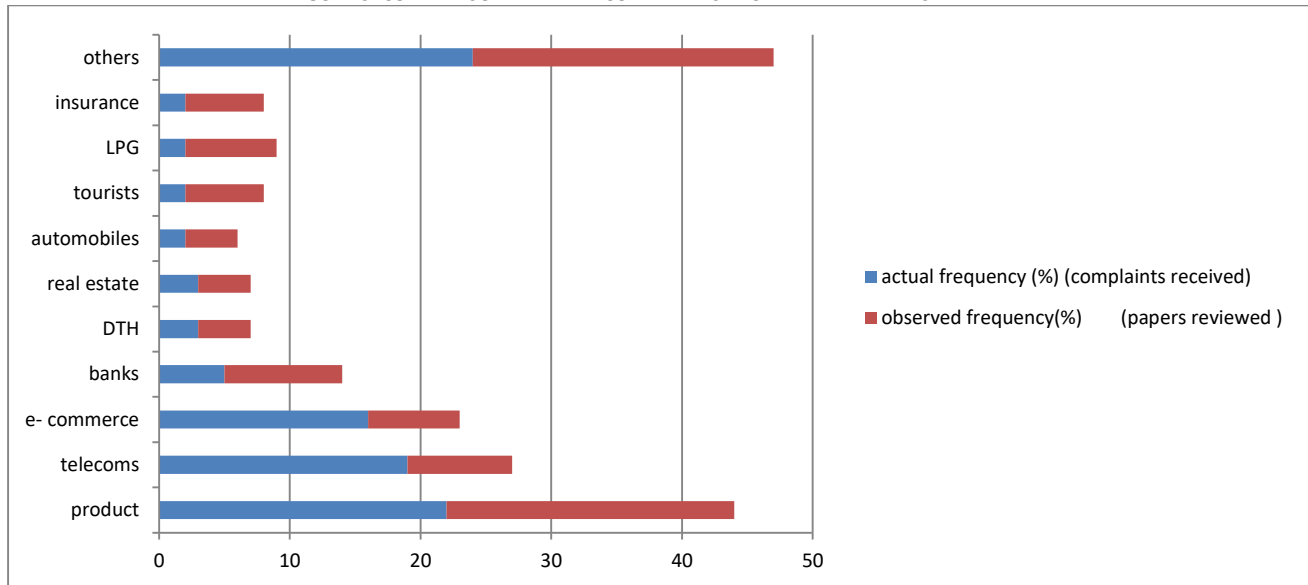
In order to study the similarities between the areas of actual complaints received as per NCH July 2015 as depicted in figure and the areas of researches initiated in, a convenient sample of 72 research papers were taken and classified on basis of their area/sector of research. This was done to check whether there is a coalition between the areas in which complaints are received and the areas in which the researches are being carried out, in order to identify the gaps in the same. This is to determine the areas which evidenced insufficient researches so as to make a fusion between the actual moot areas and the direction of researches being initiated. A breakup of the papers on the basis of area of research is summarised in the following table:

TABLE 3: SECTOR WISE BREAKUP OF RESEARCH PAPERS

Serial no.	Area/sector of research	No. Of papers
1	e- commerce	5
2	Products	14
3	Tourists	4
4	Banks	6
5	Telecoms	6
6	DTH	3
7	Real estate	3
8	Insurance	4
9	Automobiles	3
10	LPG	5

On the basis of the above table, a frequency chart was prepared to confront figure 2 depicting sector wise division of complaints received by NCH July, 2015, in order to collate the two sets of information so collected. The results are depicted in the form of a stacked bar graph given below.

FIGURE 3: COMPARISON BETWEEN COMPLAINTS RECEIVED AND PAPERS REVIEWED

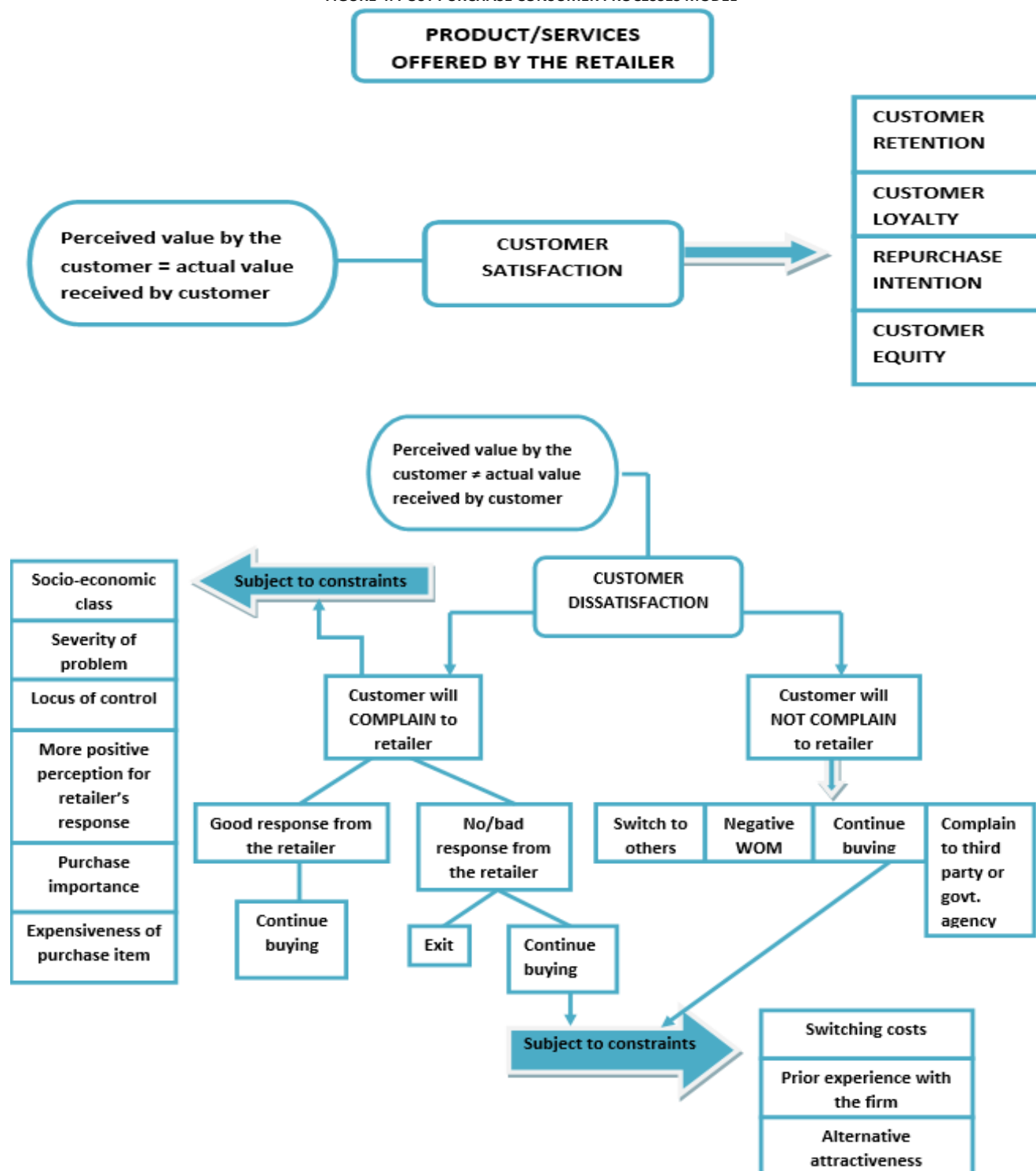


From the above figure, it can be seen that majority of the areas showed no significant difference between the magnitudes of actual complaints received and researches initiated in the respective areas. As evident from above figure category 'product' witnessed almost equal proportion of actual and observed frequency. The same applies to other categories like 'insurance', 'LPG', 'tourism', 'automobiles', 'real estate', 'DTH', 'banks', and 'others' which consists of areas namely medical services, beauty products, financial services, restaurants services etc. However, in case of e- commerce as well as telecoms astonishing results have been seen. These areas lack sufficient research with respect to the magnitude of complaints received in these areas. The magnitudes of deviations seen in these areas are almost more than half between the actual and observed frequencies.

## 7. POST PURCHASE CONSUMER PROCESSES

Based on the understanding of the previous studies discussed in this paper, a Post purchase consumer processes model is presented below:

FIGURE 4: POST PURCHASE CONSUMER PROCESSES MODEL



Source: Compiled by Author

The above model depicts a consumer's post purchase behaviour. It starts with the comparison of expected value of product/service perceived by the consumer with the actual value he received from the product/service rendered by the retailer. When the two equates i.e. the expected value of product/service perceived by the consumer and the actual value he received from the product/service rendered by the retailer, the consumer is said to be satisfied. Customer satisfaction is said to result in customer retention, customer loyalty, repurchase intention and add to customer equity. However, if the same does not equate a customer is said to be dissatisfied with the product/service rendered to him. Generally, a dissatisfied customer is expected to make complain to the retailer but it is not true always. As discovered from the papers discussed above, not all customers who are dissatisfied complain to retailer. A dissatisfied customer complains to the retailer subject to certain conditions i.e. factors determining customer complaining behaviour. Some of them as mentioned in the model are:

- **Socio-economic class of the customer:** It is studied that the more upper the class, to which a customer belongs to, the more he tends to complain.
- **Severity of problem:** it implies the more severe the problem related to the product/service is, the more a customer tends to complain.
- **Locus of control:** it means the more the blame of dissatisfaction can be placed on others, the more a customer tends to complain.
- **More positive perception for retailer's response:** the more positive a customer's perception for retailer's response is, the more he will tend to complain.
- **Purchase importance:** the more important the product/service is to the customer, even a little defect will induce him to complain.

• **Expensiveness of purchase item:** the more expensive the product/service is, the more cautious a customer is and complains on slighter defects even. Subject to above mentioned conditions a customer will decide to whether complain or not. If he decides to complain, his grievance will either be resolved satisfactorily or not. In case of satisfactory resolution of query, he will continue to be the customer of the same retailer and will involve in repeat purchases. However, if he gets bad/no response from the seller, he might exit the firm and move on to other retailers, or he may even continue buying from the same retailer but subject to certain conditions. Few of them as depicted in the model are below.

- **Switching costs:** if cost of moving from one retailer to another is sufficiently high either in monetary terms, time or efforts involved etc., a customer prefer to stick to the same retailer.
- **Prior experience with the firm:** if the customer's previous experience with the firm is so positive, he tends to ignore slight deviations in expected and actual value of the purchase received by him.
- **Alternative attractiveness:** when a customer is unable to get a product/service to replace the existing product/service, he is likely to stick to the same retailer. The deviations, between substitute product available and product under consideration, can be in any terms for instance it can be quality differences, price differences etc.

Subject to above mentioned constraints a customer may continue buying even in the case of unsatisfactory resolution of grievance. In case of no complaint by the dissatisfied customer, a customer is said to be involved in one of the above given situations i.e. switch to other retailers, negative word of mouth, complaint to third party or some government agency and even continue buying from the same retailer subject to the same conditions mentioned just above. However, he may also get involved in two of the three given situations at a time i.e. switch to other retailer and spread negative word of mouth for the previous retailer or it can be continue buying from the same retailer subject to given conditions as mentioned in the model and also spread negative views about the retailer in the public.

## 8. CONCLUSION

The current study tried to explore the literature available on customer dissatisfaction, so much research papers initiated in this area starting from 1973 to 2014 can be seen from this study. This paper has tried to summarise each research paper mentioned above on the basis of themes of customer dissatisfaction and further tried to correlate them by finding out the commonalities in the papers under study. On the basis of such analysis, one can conclude that not only satisfied customers can add to customer equity of a firm but a dissatisfied customer can also be moulded to add to the customer equity (TARP study, 1979). This can be made possible by listening to their grievances, inducing them to complain about dissatisfaction if any, satisfactorily resolving their complaints, making them alternative ways available to reach retailer in case complaints not satisfactorily resolved etc. This highlights the vitality of customer complaint handling mechanism's adoption in the firm. A formal mechanism offered by the firm to his customers to file their complaints will have dual effects for the firm itself. This is so, by allowing the dissatisfied customers to file their complaints, gives them a chance to vent their frustration and thereby decreasing their dissatisfaction (Prashanth U. Nyer, 2000; Mark D. Alickle et al), and by decreasing dissatisfaction a customer is expected to involve in repurchase behaviour. On the other hand, by listening to customer grievances, a firm is able to know about its area of improvement and thereby offering better services to the customers in future. In the grand scheme of things it's common for customers to not provide feedback. Firms are then left to wonder whether their products and services are being received positively or negatively, such valuable piece of information comes from the opportunity the businesses provide its customers to express their opinions and experiences. Give their customers the opportunity to rant, complain, congratulate, praise and suggest ways to improve. At its crux, complaints management truly is an essential component of customer service and business success. Not only is it the means to gather valuable customer insight, but also helps in company's progress to improvements that lead to reduced costs, increased profitability and increased customer satisfaction. It can be concluded that inducing complaints from customers and its management is an issue of utmost importance in customer sustainability in the business.

On the basis of the literature reviewed a customer post-purchase processes model has been suggested. This model will be helpful to the marketers in understanding the post buying behaviour of consumer in the state of satisfaction/dissatisfaction.

Since it is an exploratory study its results cannot be generalised, for that one needs to carry out a conclusive research. This paper has tried to cover various themes and its components by different authors over period of time. The result of the study was concluded on selective papers and some other important papers may have been missed out during analysis. Further study can be done to check the validity of the model proposed in the paper, with some practical data. Also, attempts can be made to further develop the model by adding factors like what determines a customer's perception for the product/service, what other factors influence customer complaining behaviour, what can be the future possible barriers to customer switching etc. This study found that very few researches have been initiated in the field of e-commerce and telecoms sector, especially the e-commerce sector, despite the growing scenario of internet and IT sector. So, researches can also be conducted to explore the drivers and antecedents of customer satisfaction/dissatisfaction in e-commerce.

## REFERENCES

1. Alickle, M.D., Braun, J.C., Glor, J.E., Klotz, M.L., Magee, J., Sederholm, H. and Siegel, R. (1992), "Complaining behavior in social interaction", *Personality and Social Psychology Bulletin*, Vol. 18 No. 3, pp. 286-95.
2. Anderson, Rolf E. "Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance." *Journal of marketing research* (1973): 38-44.
3. Andreassen, Alan R. "A taxonomy of consumer satisfaction/dissatisfaction measures." *Journal of Consumer Affairs* 11.2 (1977): 11-24.
4. Andreassen, T.W. (2000), "Antecedents to satisfaction with service recovery", *European Journal of Marketing*, Vol. 24 No. 1/2, pp. 156-75.
5. Bearden, William O., and Jesse E. Teel. "Selected determinants of consumer satisfaction and complaint reports." *Journal of marketing Research* (1983): 21-28.
6. Bhattacharya, C. B., & Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationship with companies. *Journal of Marketing*, 67, 76–88 (April).
7. Blum, Milton L., John B. Stewart, and Edward W. Wheatley. "Consumer affairs: Viability of the corporate response." *The Journal of Marketing* (1974): 13-19.
8. Customer Care M&C. (2005). First results of the 2005 national customer rage study. Available at: <http://www.customercaremc.com>.
9. Day, R.L. (1980), "Research perspectives on consumer complaining behavior", in Lamb, C. and Dunne, P. (Eds), *Theoretical Developments in Marketing*, American Marketing Association, Chicago, IL, pp. 211-15.
10. Deiner, Betty J. And Stephen A. Greyser (1978), "consumer views of redress needs," *journal of marketing*, 42 (October), 21-27.
11. Fornell, C, "Increasing the Organizational Influence of Corporate Consumer Affairs Departments", *Journal of Consumer Affairs*, Vol. 15, Winter 1981, pp. 191-213.
12. Fornell, C. and Wernerfelt, B. (1987), "Defensive marketing strategy by customer complaint management", *Journal of Marketing Research*, Vol. 24, November, pp. 337-46.
13. Fornell, Claes, and Birger Wernerfelt. "Defensive marketing strategy by customer complaint management: a theoretical analysis." *Journal of Marketing research* (1987): 337-346.
14. Fornell, Claes, and Robert A. Westbrook. "The vicious circle of consumer complaints." *The Journal of Marketing* (1984): 68-78.
15. Goodwin, Cathy, and Ivan Ross. "Consumer evaluations of responses to complaints: What's fair and why." *Journal of Consumer Marketing* 7.2 (1990): 39-47.
16. Grabick, K. (1980), "consumer satisfaction, dissatisfaction and complaining behaviour,"
17. Grainer, M.A., McEvoy, K.A. and King, D.W., "Consumer Problems & Complaints: A National View", in Wilkie, W.L. (Ed.), *Advances in Consumer Research*, Association for Consumer Research, Ann Arbor, MI, 1979, pp. 494-500.
18. Granbois, Donald, John O. Summers, and Gary L. Frazier. "Correlates of consumer expectation and complaining behavior." *Consumer satisfaction, dissatisfaction and complaining behavior* (1977): 18-25.
19. Grégoire, Y., & Fisher, R. J. (2006). The effects of relationship quality on customer retaliation. *Marketing Letters*, 17, 31–46 (January).



20. Grégoire, Yany, and Robert J. Fisher. "Customer betrayal and retaliation: when your best customers become your worst enemies." *Journal of the Academy of Marketing Science* 36.2 (2008): 247-261.
21. Gronroos, C. (2000), *Service Management and Strategy: Marketing the Moments of Truth in Service Competition*, 2nd ed., Lexington Books, Lexington, MA.
22. Gruber, Thorsten, Isabelle Szmigin, and Roediger Voss. "Handling customer complaints effectively: A comparison of the value maps of female and male complainants." *Managing Service Quality: An International Journal* 19.6 (2009): 636-656.
23. Halstead, D. and Page, T.J. Jr (1992), "The effects of satisfaction and complaining behavior on consumer repurchase intentions", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 5, pp. 1-11.
24. Hess, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: The impact of relationship factors on customer satisfaction. *Journal of the Academy of Marketing Science*, 31, 127-145 (Spring).
25. Kasouf, C.J., Celuch, K.G. and Strieter, J.C. (1995), "Consumer complaints as market intelligence: orienting context and conceptual framework", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 8, pp. 59-68.
26. Keaveney, Susan M. "Customer switching behavior in service industries: An exploratory study." *The Journal of Marketing* (1995): 71-82.
27. Kietzmann, Jan, and Ana Canhoto. "Bittersweet! Understanding and managing electronic word of mouth." *Journal of Public Affairs* 13.2 (2013): 146-159.
28. Kolodinsky, J. and Aleong, J. (1990), "An integrated model of consumer complaint action applied to services: a pilot study", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 3, pp. 61-70.
29. Kowalski, R.M. and Erickson, J.R. (1997), "Complaining: what's all the fuss about?", in Kowalski, R.M. (Ed.), *Aversive Interpersonal Behaviors*, Plenum Press, New York, NY, pp. 91-110.
30. Kowalski, R.M., Cantrell, C.C. and Van Hout, M. (1996), "Interpersonal and affective consequences of complaints and complaint responses", unpublished manuscript, Western Carolina University, cited in Kowalski, R.M. and Erickson, J.R., 1997.
31. Lawther, Karen, S. Krishna, and V. Valle. "The consumer complaint process: Directions for theoretical development." *New Dimensions of Consumer Satisfaction and Complaining Behavior* (1979): 10-15.
32. Levesque, T. and McDougall, G. (2000), "Service problems and recovery strategies: an experiment", *Canadian Journal of Administrative Sciences*, Vol. 17 No. 1, pp. 20-37.
33. Levesque, Terrence J., and Gordon HG McDougall. "Customer dissatisfaction: the relationship between types of problems and customer response." *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration* 13.3 (1996): 264-276.
34. Mark D. Et al. "complaining behaviour in social interaction." (1992)
35. Mattila, A. S. (2001). The impact on relationship type on customer loyalty in a context of service failures. *Journal of Service Research*, 4, 91-101 (November).
36. Mattila, A. S. (2004). The impact of service failures on customer loyalty: The moderating role of affective commitment. *International Journal of Service Industry Management*, 15(2), 134-149.
37. Mittal, Banwari, and Walfried M. Lassar. "Why do customers switch? The dynamics of satisfaction versus loyalty." *Journal of services marketing* 12.3 (1998): 177-194.
38. Mohamed Zairi, (2000), "Managing customer dissatisfaction through effective complaints management systems", *The TQM Magazine*, Vol. 12 Iss 5 pp. 331-337
39. Nyer, P.U. (1999), "Cathartic complaining as a means of reducing consumer dissatisfaction", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 12.
40. Nyer, Prashanth U. "An investigation into whether complaining can cause increased consumer satisfaction." *Journal of consumer marketing* 17.1 (2000): 9-19.
41. Oliver, R.L. (1987), "An investigation of the interrelationship between consumer (dis)satisfaction and complaint reports" in Wallendorf, M. and Anderson, P. (Eds), *Advances in Consumer Research*, Vol. 14, Association for Consumer Research, Ann Arbor, MI, pp. 218-22.
42. Pennebaker, J.W. and Beall, S.K. (1986), "Confronting a traumatic event: toward an understanding of inhibition and disease", *Journal of Abnormal Psychology*, Vol. 95 No. 3, pp. 274-81.
43. Pennebaker, J.W., Hughes, C.F. and O'Heeron, R.C. (1987), "The psychophysiology of confession: linking inhibitory and psychosomatic processes", *Journal of Personality and Social Psychology*, Vol. 52 No. 4, pp. 781-93.
44. Phillip K. Hellier Gus M. Geursen Rodney A. Carr John A. Rickard, (2003), "Customer repurchase intention", *European Journal of Marketing*, Vol. 37 Iss 11/12 pp. 1762-1800
45. Plymire, J. (1991), "Complaints as opportunities", *Journal of Consumer Marketing*, Vol. 8, Spring, pp. 39-43.
46. Rezghi Rostami, Alireza, Changiz Valmohammadi, and Jahan Yousefpoor. "The relationship between customer satisfaction and customer relationship management system; a case study of Ghavam Bank." *Industrial and Commercial Training* 46.4 (2014): 220-227.
47. Richins, Marsha L. "Negative word-of-mouth by dissatisfied consumers: A pilot study." *The journal of marketing* (1983): 68-78.
48. Schibrowsky, John A., and Richard S. Lapidus. "Gaining a competitive advantage by analyzing aggregate complaints." *Journal of Consumer Marketing* 11.1 (1994): 15-26.
49. Settle, Robert b. And linda L. Golden (1974), "attribution and action when product fails,"
50. Stiles, W.B. (1987), "I have to talk to somebody: a fever model of disclosure", in Derlega, V.J. and Berg, J.H. (Eds), *Self-Disclosure: Theory, Research and Therapy*, Plenum Press, New York, NY, pp. 257-82.
51. Swan, John E., and Linda Jones Combs. "Product performance and consumer satisfaction: A new concept." *Journal of marketing* 40.2 (1976): 25-33.
52. TARP (1979), *Consumer Complaint Handling in America: Final Report*, US Office of Consumer Affairs, Technical Assistance Research Programs, Washington, DC.
53. Tax, S., Brown, W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing*, 62, 60-76 (April).
54. Tax, S.S. and Brown, S.W. (2000), "Service recovery: research insights and practices", in Swartz, T. and Iacobucci, D. (Eds), *Handbook of Services Marketing and Management*, Sage, Thousand Oaks, CA, pp. 271-86.
55. V.-W. Mitchell, (1993), "Handling Consumer Complaint Information: Why and How?" *Management Decision*, Vol. 31 Iss 3 pp.
56. Valle, Valerie A., and Randi Koeske. "Elderly Consumer Problems: Actions, Sources of Information and Attributions of Blame." *annual meeting of the American Psychological Association, San Francisco*. 1977.
57. Warland, Rex H., Robert O. Herrmann, and Jane Willits. "Dissatisfied consumers: Who gets upset and who takes action." *Journal of Consumer Affairs* 9.2 (1975): 148-163.
58. Wirtz, Jochen, and Anna S. Mattila. "Consumer responses to compensation, speed of recovery and apology after a service failure." *International Journal of service industry management* 15.2 (2004): 150-166.
59. Zaichkowsky, Judy, and John Liefeld. "Personality profiles of consumer complaint letter writers." *Consumer satisfaction, dissatisfaction and complaining behavior. Bloomington, IN: Indiana University School of Business, Department of Marketing* (1977): 124-129.
60. Zairi, Mohamed. "Managing customer satisfaction: a best practice perspective." *The TQM Magazine* 12.6 (2000): 389-394.

## A LITERATURE REVIEW ON EFFICIENCY OF INDIAN CAPITAL MARKET

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**ABSTRACT**

*In India, the history of capital markets dates back to the 18th century when East India Company securities traded the country. The present study is largely based on the available secondary data. The capital market in India is a market for securities, where companies and governments can raise long term funds. It is a market designed for the selling and buying of stocks and bonds. Stocks and bonds are the two major ways to generate capital and long term funds. The capital market is a vital of the financial system. Capital market provides the support of capitalism to the country. The wave of economic reforms initiated by the government has influenced the functioning and governance of the capital market. The important divisions of the capital market are stock market, bond market and primary, secondary markets. Primary markets deal with the trade of new issues of stocks and other securities, whereas secondary market deals with the exchange of existing or previously-issued securities.*

**KEYWORDS**

capital markets, long-term securities, stock exchange.

**INTRODUCTION**

History of the capital market in India dates back to the 18 century when east India co. Securities was traded in country. Until the end of the 19th century securities trading was unorganized and the main trading centers were Bombay and Calcutta. Indian capital markets are one of the oldest markets in Asia as well as in the world. There are 22 stock exchanges in India, the first being the Bombay Stock Exchange (BSE), which began formal trading in 1875, making it one of the oldest in Asia. It was an unincorporated body of stockbrokers, which started doing business in the city under a banyan tree, in front of the town hall in Bombay. The stock exchanges in Calcutta and Ahmadabad also industrial and trading centers came up later. There has been much fluctuation in the stock market on account of the American war and the battles in Europe.

The stock markets have had many turbulent times in the last 140 years of their existence. The imposition of wealth and expenditure tax in 1957 by Mr. T. T. Krishnamachari, the then finance minister, led to a huge fall in the markets. The dividend freeze and tax on bonus issues in 1958-59 also had a negative impact. War with China in 1962 was another memorably bad year, with the resultant shortages increasing prices all round. This led to a ban on forward trading in commodity markets in 1966, which was again a very bad period, together with the introduction of the Gold Control Act in 1963.

A primary auction market for Government securities has been created and a primary dealer system was introduced in 1995. There are six authorized primary dealers. Currently, there are 31 mutual funds, out of which 21 are in the private sector. Mutual funds were opened to the private sector in 1992. Earlier, in 1987, banks were allowed to enter this business, breaking the monopoly of the Unit Trust of India (UTI), which maintains a dominant position.

**MEMBERS OF THE INDIAN CAPITAL MARKETS**

In order function properly the Indian capital markets operate through the following entities:

- (a) India Capital Markets Pvt. Ltd.- Members NSE, BSE and NSDL, ICM Commodities Pvt Ltd. – Members MCX, NCDEX.
- (b) SEBI Registered PMS.

**THE FUNCTIONS AND MAIN INSTITUTIONS OF THE INDIAN CAPITAL MARKET****(1) THE FUNCTIONS OF THE INDIAN CAPITAL MARKET ARE AS FOLLOWS**

- (i) Disseminate information efficiently for enabling participants to develop an informed opinion about investment, disinvestments, reinvestment, or holding a particular financial asset.
- (ii) Enabling quick valuation of financial instruments-both equity and debt.
- (iii) Providing insurance against market risk or price risk through derivative trading and default risk through investment protection fund.
- (iv) Enable wider participation by enhancing the width of the market by encouraging participation through networking institutions and associating individuals.
- (v) Provide operational efficiency through:
  - (a) simplified transaction procedure,
  - (b) lowering settlement timings, and
  - (c) lowering transaction costs.
- (vi) Develop integration among:
  - (a) Real sector and financial sector,
  - (b) Equity and debt instruments,
  - (c) Long-term and short-term funds,
  - (d) Long-term and short-term interest costs,
  - (e) Private sector and government sector,
  - (f) Domestic funds and external funds.
- (vii) Direct the flow of funds into efficient channels through investment, disinvestments, and reinvestment.

**(2) THE MAIN MEMBERS OF THE INDIAN CAPITAL MARKET**

The capital market aids economic growth by mobilizing the savings o the economic sectors and directing the same towards channels of productive uses. This is facilitated through the following: The Industrial Financial Corporation of India (IFC).

- a) The Industrial Credit and Investment Corporation of India (ICICI).
- b) The Refinance Corporation of India (RFC).
- c) The State Financial Development Corporations (SFCs).
- d) National Industrial Development Corporation (NIDC).
- e) Industrial Development Bank of India (IDBI).
- f) The Credit Guarantee Corporation of India (CGC).
- g) Life Insurance Corporation of India (LIC).
- h) National Industrial Reconstruction Corporation of India (NIRC).
- i) Merchant Banking Institutions (MBIs).
- j) Unit Trust of India (UTI).

These members are mainly financial institutions which provide the liquidity that is needed to propel the machinery of the Capital Market. The financial power of the Capital Market is in their hands. SEBI has the responsibility to oversee their proper functioning as well as the other members.

### **(3) PRODUCTS AND SERVICES OF THE INDIAN CAPITAL MARKET**

- (a) Equity Broking - BSE and NSE
- (b) Derivatives Futures and Options
- (c) Internet Broking- Online Trading
- (d) Commodities Trading - NCDEX and MCX
- (e) Mutual Fund Investment
- (f) Initial Public Offerings (IPO)
- (g) Institutional Broking
- (h) Depository Services - NSDL and CDSL
- (i) Portfolio Management Services
- (j) NRI Investments
- (k) Arbitrage

### **ISSUES AND CHALLENGES OF INDIAN CAPITAL MARKET**

Opening of the financial markets will result in competition and greater efficiency. However, foreign participation will bring increased risk and exposure. Stability is thus need for financial markets for which safeguarding mechanism need to be established. The equity market in India is extremely vibrant but equity based funding solely, cannot lead the economy to growth. The debt market remains underdeveloped with a huge potential for increased activity. A strong hand is required to drive the long term financing of infrastructure, housing and private sector development. The road ahead for deepening the capital market needs to be paved by the strong linkage between development of economy and the financial system. A greater measure of transparency is also required to build regulating procedures, to bring in a new dimension to financial market and take it to the next level. One of the challenges before the Indian capital market is expanding the investor base and provide them access to high quality financial service. With a population of more than a billion, a mere 1% of population participates in capital market and of that only a fraction is active. Investor participation is very shallow considering the size of Indian Economy Trading volume in Indian capital market are lower as compared to other markets such as US, China, UK, Germany etc. Another Challenge faced by the investor is the cost involved in trading, which are comparatively higher in India, than in developed markets Way Forward to Capital Market

1. Investor education and regulation of mutual fund distributors
2. Allowing AMCs to the flexibility to charge fees
3. Innovative products across different asset classes
4. Amending tax regime to encourage domestic AMCs to manage foreign funds from India
5. Although higher investment by domestic institutional investors such as insurance companies, pension funds to make investment in capital markets
6. Make implementation of proposal of SME stock exchange effective
7. Allowing institutional investors to participate in commodity markets
8. Reduction in current withholding tax of 20% on income from debt securities to encourage investment in debt market.

### **REGULATIONS OF THE INDIAN CAPITAL MARKET**

Securities and Exchange Board of India (SEBI) was set up as an administrative arrangement in 1988. In 1992, the SEBI Act was enacted, which gave statutory status to SEBI. It mandates SEBI to perform a dual function: investor protection through regulation of the securities market and fostering the development of this market. SEBI has been vested most of the functions and powers under the Securities Contract Regulation (SCR) Act, which brought stock exchanges, their members, as well as contracts in securities which could be traded under the regulations of the Ministry of Finance. It has also been delegated certain powers under the Companies Act. In addition to registering and regulating intermediaries, service providers, mutual funds, collective investment schemes, venture capital funds and takeovers, SEBI is also vested with the power to issue directives to any person(s) related to the securities market or to companies in areas of issue of capital, transfer of securities and disclosures. It also has powers to inspect books and records, suspend registered entities and cancel registration.

The securities market is regulated by various agencies such as the Department of Economic Affairs (DEA), The Department of company affairs (DCA), the Reserve Bank of India and the SEBI. The activities of these agencies are coordinated by a high level committee on capital and financial markets.

The capital market for equity and debt securities is regulated by the Securities and Exchange Board of India. The SEBI has full autonomy and authority to regulate and develop the capital market. The government has framed rules under the Securities Contracts Act (SCRA), the SEBI Act and the Depositories Act. The power in respect of the contracts for sales and purchase of government securities, money market securities and ready forward contracts in debt securities are exercised concurrently by the RBI.

The four main legislations governing the capital market are as follows:

1. The SEBI Act, 1992 which establishes the SEBI with four fold objectives of protection of the interests of investors in securities, development of the securities market, regulation of the securities market and matter connected therewith and incidental thereto.
2. The Companies Act, 1956 which deals with issue, allotment and transfer of securities, disclosures to be made in public issues, underwriting, rights and bonus issues and payment of interest and dividends.
3. The Securities Contracts Regulation Act, 1956 which provides for regulations of securities trading and the management of stock exchanges.
4. The Depositories Act, 1996 which provides for establishment of depositories for electronic maintenance and transfer of ownership of demat securities.

### **DEPOSITORY SYSTEM OF INDIA**

A Depository Participant (DP) is described as an agent of the depository. They are the intermediaries between the depository and the investors. The relationship between the DPs and the depository is governed by an agreement made between the two under the Depositories Act, 1996. In a strictly legal sense, a DP is an entity who is registered as such with SEBI under the provisions of the SEBI Act. As per the provisions of this Act, a DP can offer depository related services only after obtaining a certificate of registration from SEBI.

A depository is an organization which assists in the allotment and transfer of securities and securities lending by using electronic form through a registered depository participant. The shares in a depository are held in the form and the depository system revolves around the concept of paper less or scrip less trading i.e. electronic. An effective and fully developed securities depository system is essential for maintaining and enhancing the market efficiency which is one of the core characteristics of a mature capital market. In march-1989, the group thirty had emphasised the importance of a central depository by highlighting the adverse effect on global investment brought about by the in efficiencies of international settlement and clearing facilities in their report on "clearance and settlement systems in the world's securities markets". The depository and custodial service is one of the developing countries. The depository system provides a wide range of service, as primary market services, secondary market services and ancillary services. A depository can be compared to a bank. A depository holds securities of investors in electronic form. Besides holding securities, a depository also provides services related to transactions in securities.

The new system thus eliminates paper work, facilitates automatic and transparent trading in scripts, shortens the settlement period and ultimately contributes to the liquidity of investment in securities. This system is also known as 'Scripless trading system'.

There is a two Depository system in India as follow:

#### (1) NATIONAL SECURITIES DEPOSITORY LTD. (NSDL)

The NSDL, the first depository in India which has been promoted by three premier institutions in India, i.e. Industrial Development Bank of India, UTI and NSE. The NSDL started from November 8 1996. The NSDL is a public limited company framed under the companies Act 1956 with a paid up capital of Rs. 105 crore, The NSDL carries out its operations through participants and the clearing corporation of the stock exchange, with participants acting as market intermediaries through whom NSDL interacts with the investors and clearing members.

NSDL performs the following functions through depository participants:

1. Enables the surrender and withdrawal of securities to and from the depository (dematerialisation and rematerialisation).
2. Maintains investor holdings in the electronic form.
3. Effects settlement of securities traded on the exchanges.
4. Carries out settlement of trades not done on the stock exchange (off-market trades).
5. Transfer of securities.
6. Pledging/hypothecation of dematerialised securities.
7. Electronic credit in public offerings of companies or corporate actions.
8. Receipt of non-cash corporate benefits like bonus rights, etc. in electronic form.
9. Stock Lending and Borrowing.

#### (2) CENTRAL DEPOSITORY SERVICES LTD (CDSL)

CDSL was promoted by Bombay Stock Exchange Limited (BSE) jointly with leading banks such as State Bank of India, Bank of India, Bank of Baroda, HDFC Bank, Standard Chartered Bank, Union Bank of India and Centurion Bank. CDSL was set up with the objective of providing convenient, dependable and secure depository services at affordable cost to all market participants. It commenced its operation in march 22 1999.

BSE has 45% stake in CDSL while the bank has a 55% stake. CDSL has been preferred platform by the government of India for carrying out actual share transactions PSUs disinvestment have been done through CDSL system. Every transaction at CDSL is doing at one e-space. The centralized system of CDSL keeps a watch on every transaction. All leading stock exchanges have established connectivity with the CDSL.

CDSL's demat services are extended through its agents called Depository Participants (DP). The DP is the link between the investor and CDSL. An investor who opens a demat account with a DP can utilise the services offered by CDSL. While the DP processes the instructions of the investor, the account and records thereof is maintained with CDSL. A DP is thus a "service centre" for the investor.

CDSL's system is based on centralised database architecture with on-line connectivity with DPs. Because of this centralised architecture, the cost for setting up a DP outfit under CDSL system is significantly lower. Similarly, the recurring costs to be incurred by a CDSL-DP in terms of maintaining back-ups and the related data storage are minimal.

This enables a CDSL-DP to offer depository services to investors at an attractive price and at the same time achieve break-even faster at much lower volumes. The centralized architecture also allows CDSL-DP to make available to the investors a to-the-minute status of their account and transactions. CDSL-DPs can also set up branches with direct electronic connectivity with CDSL.

CDSL perform a wide range of securities related functions through DPS. The services of Depository participants are as follow:

1. To record and maintenance of individual investors beneficial holding in an electronic form.
2. Dematerialisations of physical securities and Rematerialisations of securities.
3. To give facility for locking of investor accounts.
4. To give facility for pledge and hypothecation of securities.
5. To make settlement of trades in electronic shares.
6. To issue a form for public offerings.

## THE BULLS AND THE BEARS

### THE BULLS

A bull market is when everything in the economy is large, people are finding jobs, GDP is rising, and stocks are rising. Possessions are just plain rosy! Picking stocks during a bull market is easier because everything is going up. Bull markets cannot last forever though, and sometimes they can lead to dangerous situations if stocks become overvalued. If a person is an optimist, believing that stocks will go up, he is called a bull and said to have a bullish outlook.

### THE BEARS

A bear market is when the economy is bad, recession is looming, and stock prices are falling. Bear markets make it tough for investors to pick profitable stocks. One solution to this is to make money when stocks are falling using a technique called short selling. Another strategy is to wait on the sidelines until you feel that the bear market is nearing its end and only then start buying in anticipation of a bull market. If a person is a pessimist, believing that stocks are going to drop, he is called a bear and said to have a bearish outlook.

## CONCLUSION

Indian Capital Market is already in the growth face. A clear policy decision from government, vigilant eye from the regulators, transparency from the stock exchanges and prudent action by the brokers and financiers is the requirement of the day to maintain the growth rate on the Securities Market. A strong capital market provides the foundation for a developed economy.

Any issues related to the corporate governance, investors simply dump those stocks and such stocks may see insane share prices. After all the governance makes or breaks a corporate and investors trust is bound to lose. In the long term future of Indian stock exchange is undoubtedly very bright and rising but at the same time Chinese stock exchange is also soaring high and unarguably US market is on the top and India can reach these heights only when the above mentioned problems is solved.

## REFERENCES

1. Barua, S K, V Raghunathan, J.R Varma, and N Vengateshwaran, 1994, Analysis of Indian Securities Industry: Market for Debt, Vikalpa.
2. Bharti V. Pathak, "The Indian Financial System", Pearson Education [India] Ltd. 2nd Edition, Year 2006 Pg. 106-110.
3. Dr. G. Ramesh Babu, "The Financial Services In India", New-Delhi, Concept Publishing Company. Year 2005 Pg. 45-46.
4. Dr. S. Guruswami, "Capital Market", The Mcgraw-Hill, Company, 2nd Edition, Year- 2010, Chapter-3, Page No 47-48.
5. Euromoney. 1996. *World Equity Guide*. UK: Euromoney Publications.
6. Gordon & Natarajan, "The Financial Markets & Services", New-Delhi, Himalya Publishing House, Year 2007. Pg. 9-10.
7. Misra, B. M. 1997. "Fifty Years of the Indian Capital Market: 1947-1997." In *Banking and Financial Sector Reforms in India*, Vol. 6, edited by Kapila, Raj and Uma Kapila.
8. Raghunathan V & Varma J R (1991): "Market Valuation Model Under Differential Taxes, Inflation, Recurring Investments and Flotation Costs", *Indian Institute of Management, Ahmedabad*, Working Paper No. 956, (Jul-Sep),
9. Raghunathan V (1991): "Stock Exchanges and Investments: Straight Answers to 100 Nagging Questions", *Tata McGraw Hill*, New Delhi, pp. 176.
10. Reserve Bank of India. *Report on Currency and Finance*, various issues.
11. Sankaran Venkateshwar (1991): "The Relationship of Indian Stock Market to Other Stock Markets", *Indian Economic Journal*, Vol. 39, No. 2 (Oct-Dec), p. 105-109.

12. Senbet, Lemma, Journal of Financial & Quantitative Analysis, Sep79, Vol. 14 Issue 3.
13. Simha S L N, Hemalatha D & Balakrishnan S (1979): "Investment Management", *Institute of Financial Management and Research*, Madras.
14. Subramanian, V. V. 1998. "Impact Assessment of Capital Market Reforms." Draft paper submitted to Asian Development Bank.
15. Susan Thomas and Ajay Shah (2002). "The stock market response to the Union Budget". *Economic and Political Weekly*, Vol. XXXVII (5), pp. 455-458.
16. Tarapore, S. S. "The Government Securities Market: The Next Stage of Reform." *Banking and Financial Sector Reforms in India*, Vol. 4.
17. Tarapore, S. S. "The Government Securities Market: The Next Stage of Reform." *Banking and Financial Sector Reforms in India*, Vol. 4.
18. Trikha Kapil (1989), "Merchant Bankers & Public Issues", *Chartered Accountant*, Vol.38, No. 6 (Dec), p.477.
19. Varma J R (1988), "Asset Pricing Models Under Parameter Non-Stationarity", Doctoral Dissertation, Indian Institute of Management, Ahmedabad.
20. Varma J R, Raghunathan, Korwar A & Bhatt M C (1992a), "The Narasimham Committee Report - Some Future Ramifications and Suggestions", Working Paper No. 1009, (Jan-Mar), Indian Institute of Management, Ahmedabad.
21. Verma J C (1990), *Merchant Banking: Organisation and Management*, Tata McGraw Hill, New Delhi, p. 354.
22. Yasaswy N J (1985): "Equity Investment Strategy", *Tata McGraw Hill*, New Delhi.
23. Zahir M A & Khanna Yakesh (1982), "Determinants of Stock Prices in India", *Chartered Accountant*, Vol. 30, No. 8 (Feb).



**INTELLECTUAL VALUE ADDED: A CASE STUDY OF HINDUSTAN PETROLEUM CORPORATION LIMITED****DR. POOJA GUPTA****ASST. PROFESSOR****KASTURI RAM COLLEGE OF HIGHER EDUCATION****NARELA****ABSTRACT**

Human capital is one of the main sources of innovation and improvement. Human capital tends to increase when an organization makes more and more use of what people know. An employee can add value due to age, additional wisdom, intelligence, training, experience, qualification etc. i.e. intellectual value added. The study focuses on the calculation of the intellectual value added of human resources of an organization & to determine the human resource efficiency. This paper aims to provide a framework for calculating and to analyze Intellectual Value Added of a public sector undertaking in India. The sample company selected for the study is Hindustan Petroleum Corporation Ltd (HPCL). This paper covers a period of six years from 2009-10 to 2014-15 of Hindustan Petroleum Corporation Ltd for measuring the generation of Intellectual Value Added and allocation of Intellectual Value Added. The analysis of this study clearly signifies that how human resources has added additional value due to some intellectual factors.

**KEYWORDS**

human capital, intellectual value added, value added.

**INTRODUCTION**

Human capital is a measure of the employees' knowledge & skills. As per Jac Fitz-enz, it is the only capital which is active. Nothing is possible without human capital in any organization. Human capital is the starting point of all ladders. It is the source of every innovation and ground of wisdom. Money can do wonders but it does not have any brain, so can't think. Machines are able to deliver more than any living being, but machines can not invent. There is a lot of evidence of the value of this asset to organizations. Human capital is the lifeblood of an organization. Though human capital is the root of innovation and advancement, but it is one of the toughest components that can be measured. When company starts investing in human capital, value increases. Human capital grows when an organization starts believing in its human resources and make judicious use of their knowledge. Therefore, to enhance productivity and add value, a company should be able to capitalize on its workforce, their ideas and knowledge. Companies' commitment towards training and education of its workforce, also lead to better productivity and value addition. Intellectual power of humans is one of the main inputs to sectors like IT sector, Teleservices sector and Banking sector etc. Skilled and intellectual man power is one of the main success factors for a knowledge based company. "Real assets will not appreciate much as businesses get commoditized; Innovation and Intellectual power are going to be the key to the future" - Mohandas Pai, CFO, INFOSYS. Intellectual Value Added (IVA) basically tells the management whether human capital is adding additional value due to age, additional wisdom, intelligence, training, experience, qualification etc.

**OBJECTIVES**

1. To use IVA as a new tool for measuring the contribution of employees in value addition.
2. To understand the usefulness of IVA.

**HYPOTHESIS**

The Null hypothesis has been framed for the study as, "The Intellectual Value Added shows an increasing trend throughout the study period".

**METHODOLOGY AND DATA SOURCE OF THE STUDY**

The present study is carried on the basis of the analysis of data available from the financial statement of Hindustan Petroleum Corporation Ltd (HPCL) for a period of 6 years (i.e. from 2009-10 to 2014-15). The study deals with the Intellectual Value Added of HPCL. The relevant data has been collected through the published annual reports and accounts of the HPCL. To supplement the data so collected from annual reports and accounts, other publications, newspapers, journals and magazines etc. have also been consulted in the present study. The financial data collected from the above mentioned sources has been edited, classified and tabulated as per requirement of the study. For the analysis of IVA reporting, data are analyzed with the help of IVA Statement.

**COMPANY PROFILE**

Hindustan Petroleum Corporation Ltd (HPCL) is a Navratna company controlled by Government of India and is one of largest oil & gas exploration Company in India. It is Fortune 500 Company and it produces high speed diesel, motor spirit & LPG (gas). The Company's business is segregated in two main segments: Downstream business, which is involved in refining, transportation & marketing of petroleum products, & business to explore and produce Hydrocarbons.

The Company is a proud owner and operator of two refineries which produces a range of petroleum fuels and specialties. One refinery is in Mumbai (West Coast) which is having a capacity of near 6.5 million metric tons per annum. Other refinery is in Vishakhapatnam (East Coast) which is having capacity near to 8.3 million metric tons per annum. The Company also owns and operates the lube refinery producing lube base oils of international standards with a capacity of around 428 thousand metric tons (TMT). This Lube Refinery is responsible for more than 40% of the India's total Lube Based Oil production. The Company is in production of more than 300 grades of lubes, specialties & greases.

The Company was established with the name 'Standard Vacuum Refining Company of India Ltd' on 5<sup>th</sup> July, 1952. Then it was re-named as 'ESSO Standard Refining Company of India Ltd' on 31<sup>st</sup> March, 1962. Hindustan Petroleum Corporation Ltd (HPCL) was formed with amalgamation & take-over of ESSO Standard & Lube India Ltd. Caltex Oil Refining (India) Ltd (CORIL) was taken over by the Indian government by passing an Ordinance. This take-over was formally approved by an Act in 1976 and finally this company was merged with HPCL in 1977. In 1978, Kosan Gas Company, which was a concessionary of Hindustan Petroleum Corporation Ltd in domestic LPG market, was taken over and amalgamated with HPCL. Thus HPCL has been formed with amalgamation of 4 different organizations (as mentioned above).

HPCL values its workforce the most. That's why HPCL is continuously delivering best performance which is realized due to deeply motivated work strength of near 11,000 employees serving the company all over India.

Commitment of company to achieve the economic, ecological and social responsibility objectives of sustainable development continuously is commendable. HPCL has been focusing more and more in the fields of Child Care, Health Care, Education, Community Development and Skill Development. It understands its social responsibility well and is involved in different measures to improve lives of weaker section of society. To keep a high morale of employees, it extends many well-being benefits to them and also to their families. It provides comprehensive medical care, housing, education and social security to them.



## ENABLING EMPLOYEES

The best way to keep the employees focused around a common purpose is to arouse passion & emotional involvement among them. Keeping this objective in mind, Hindustan Petroleum Corporation Ltd started upon a process of Organizational Transformation. This is named as **Project ACE (A-Achieving C-Continuous E-Excellence)**.

**Project ACE** was aimed to develop and realize a vision which is mutually shared by all organizational members at large. Main idea is to establish HPCL as an innovative and learning organization in which employees are consistently looking to learn new skills and capabilities to deliver their best, and achieve better business results.

**Balanced Scorecard (BSC)** has been adopted as one of the other strategic initiative. The main objective of BSC is to clearly define all measurable business outcomes and cascade it to different levels of HPCL.

Such initiatives such as Project ACE and BSC, ensures that every employee is set free to think beyond boundaries & can challenge themselves as well as each other. Baseline behind this is that innovation is not a copyright of few individuals. It can come any time and from any one.

Along with all above measures, HPCL has incorporated a very strong performance management processes. This process is capable enough to map and meet up every employee's hopes and aspirations. Such kind of empowered environment helps employees to bring out their best. HPCL takes utmost care for career progression of its employees. HPCL performance appraisal process is more than just assessment as it is based on BSC Approach. This process helps employees in identifying and developing their strengths as well as weaknesses. And it helps in aligning them towards organizational objectives by means of mentoring, counseling, and additional inputs through particular training programs.

## TRAINING AND DEVELOPMENT

Skill up-gradation is one of the major components for Human Resource Development. Apart from mandatory exercise of equipping the executives with latest and specialized knowledge in fields of upstream oil and gas sector, attempts are made to reach out to best faculty from India and foreign countries to organize training programs.

HPCL is having a fully functional Corporate Training Department which is to address the learning & development requirements of its employees. Vision of Human Resource department is to bring best out of their employees to be a world class organization. Based on vision of Human Resource department, Corporate Training Department's vision is to "add on value by increasing competencies of its employees using world class and innovative learning methods and be a strategic partner to business by empowering employees to realize and perform to their full potential".

HPCL is having Training Institute at Nigdi in Pune, which is fully functional and equipped with all modern amenities. This institute demonstrates focus of HPCL on trainings.

Along with in-house trainings, company also sponsors Study Tour for its employees to enrich their knowledge and skills. It also sends employee groups for select foreign training to enrich their knowledge and skills.

Company promotes e-learning and there are many such programs developed to enrich competencies of its employees. It also sponsors certification courses on Project Management (such as PMP), and Supply Chain Management (such as CSCP). It is also having an Education Refund Plan which helps the employees to undertake academic courses for their self-development process, in line of Company's requirement.

Company provides a Study leave policy as well for employees who want to go for higher studies on their own.

To promote merit and to help employees to perform to their full potential, HPCL keeps a huge focus on innovation and allows them freedom to think something new and different. All employees are encouraged by management to bear additional responsibility and thus contribute to the success of the organization.

## AWARDS & RECOGNITIONS

Employees in HPCL are awarded and recognized from time to time. HPCL is having special focus on women empowerment. Every year, several programmes for empowerment and development of women are organized.

In HPCL, Hard-work & contribution pays off and always gets noticed. If someone's performance is exceptional and has led to substantial savings for the company, they are rewarded with "**Outstanding Achievement Award**".

Loyalty is rewarded as well in HPCL. Employees who served organization continuously for fifteen years get rewarded for their service as they have been a backbone behind successful journey of Hindustan Petroleum Corporation Ltd.

## EMPLOYEE FEEDBACK

Company pays every attention to the feedback of its workforce. It encourages employees to openly interact with the Management. Such sharing of views is facilitated through various channels such as discussions with the union representatives and direct communication with the employees.

In addition to employee satisfaction, HPCL is also recognized for its role as a 'responsible leader'. HPCL is continuously trying to make positive, measurable difference in lives of the people in society who does not have any direct-indirect link to organization.

Company profile itself illustrates significance of human resources and their knowledge in any organization making companies to invest more and more to keep employee satisfaction index high. This study focuses on intellectual value added by human resources of a company.

## CONCEPTUAL FRAMEWORK OF INTELLECTUAL VALUE ADDED

Value added in the product is the utility added in the raw material by various factors of production. A utility in the product is added by the providers of capital by providing adequate amount of capital, by government by providing infrastructure facilities and employees by doing the manual work. A manual work performed by an employee may be consisting of two factors:

1. Routine manual work requiring routine and basic knowledge.
2. Intellectual manual work requiring additional wisdom, intelligence, experience and knowledge.

Value addition by the employees is contributed by performing routine operation in a scheduled and phased manner performed by each and every employee in a normal way. This does not require additional capabilities and additional intelligence. Intellectual Value Added (IVA) is the additional value added by an employee due to age, additional wisdom, intelligence, training, experience, qualification etc. This value added may be in the form of better qualities, less use of resources (material, power etc.) or new product development in lesser time frame.

The intellectual value may be added due to some factors i.e., education, intelligence, work experience training, inherent intellectual capabilities, carefulness and wisdom, common sense, involvement in R&D, management support and encouragement, and cultural environment.

Who adds Additional Value?

- An employee who is using information technology in performing daily business activities and is having a significant impact on the efficiency as well as productivity of the job being done is the person who generates IVA.
- A person who follows a process that asks for knowledge from internal as well as external sources, to produce a product which stands out of competition by its distinguishable information content.
- One who is extremely talented and is serious about job purpose.
- One who knows what can actually be accomplished.
- A person who thinks of making living by developing and using knowledge.
- A person who is making living by creating, managing, or spreading knowledge.
- A person gathering information from some source; distributing value-added products to others & thereby adding value to the information.

- One who is converting business & personal experience into knowledge by means of capture, assess, apply, and share, and spreads widely his/her ideas within the organization in order to solve particular problems/to create value.
- A person who uses head more than the hands to add some value.

Apart from technical skills & abilities, an employee who intends to generate IVA is expected to have professional experience as well as soft skills like knowledge of cultural, personal, and political aspects in any business. The personal aspects comprise of open, candid, & effective communication skills, a warm & compatible personality, and sensitivity to the political pressures in the organization in general. These are people who want a challenge and can create a difference. They prefer to be employed by a company that creates knowledge, not one that employs knowledge.

### HOW INTELLECTUAL CAPITAL GROWS

Human capital is the only active capital and it tends to grow when an organization makes more and more uses more of what its people know. Money rules everything but it is not having brain. Machines can perform far better than human beings but they cannot invent new things. So this asset is of utmost importance to any organization.

### USING MORE OF WHAT PEOPLE KNOW

Unloosing the human capital already residing in an organization can be achieved by minimizing mindless & meaningless tasks, meaningless paperwork, and unproductive disharmony. Manufacturing companies in late 19<sup>th</sup> century broke down production into specialized tasks thereby wasting human assets in such activities by performing repetitive tasks. As per quotes, we use only 2 to 4% of our brain-power. We can move this usage to higher level. We use a very small percentage of the human potential. It is not only their brainpower but also their imaginations, their energy, and so on. Some companies get eight hours of work from people, but they do not get any benefit out of their minds.

In this Information era, we can't allow inefficient use of human capital. The only ideas that matter are 'A' ideas. There is no second thought. That means we need to get everyone in the organization involved. A company that can more fully engage this capability of employee's, is going to get a much bigger return on that investment and achieve things that it can't possibly achieve by not engaging that capability. Using simple methods, such as teaching people, supporting people psychologically, emotionally, and physically, we engage people more and more and draw out of them best of their capability. If we roll that up to the top, until we make all the connections from human motivation, skill development, and commitment up through the operating organization to the enterprise goals, we will start to get quantum leaps simply because we have used more capability. Radical changes come from the imagination of people who are able to see what is possible. The more we are engaging the full potential of something, the better return we are going to get out of it.

In the organization there should be a process where employees propose changes in work routines and bosses need to approve/reject them on the spot. It will pave the way to get more and more ideas from people.

### AREAS OF INTELLECTUAL CAPITAL

Acquiring, maintaining, developing, and, retaining are four intellectual capital areas. It's a new lexicon to understand human effort. If we think of an asset, we first think to get hold of it by buying, leasing or whatever. Once we acquire it, we need to maintain it. If it's a machine, we need to oil it, perform some preventive maintenance, etc. If its people, we got to pay salary to them, provide benefits & other necessary support. We have to retain assets, that is, we need to keep them. The same applies with people. We need to retain people and thus their talent. One unique thing is development, because people (in terms of knowledge) can be developed. Machines can't be developed. Thus acquiring, maintaining, developing, and, retaining are the four things that companies need to do to manage a human asset.

### RESULTS AND DISCUSSION

The IVA Statement of HPCL has been prepared in two parts viz., (A) and (B). Part (A) reveals the generation of IVA while part (B) discloses information regarding allocation of IVA. To arrive at the figure of Intellectual Value Added firstly the value per employee for the previous year is subtracted from the value per employee for the current year then it is multiplied with the number of employees. As a formula it may be expressed like this:

$$\text{Intellectual Value Added} = (V_1 - V_2) \times N$$

Where

$V_1$  = Value per employee for the current year

$V_2$  = Value per employee for the previous year

$N$  = No. of employees

Value per employee calculation is done using 'Lev & Schwartz' model. This 'Lev and Schwartz' model equates the anticipated future earnings as the surrogate of the 'value' of an employee. NPV (Net Present Value) for the remaining years of service is calculated at the discount rate of 8.25% in 2009-10 & 2010-11, 8.50% in 2011-12, 8.00% in 2012-13, 9.36% in 2013-14, 7.90% in 2014-15. This valuation has been calculated for regular employees, covering categories such as management and non-management.

From Table 1 it is evident that the absolute figure of Intellectual Value Added marked a fluctuating trend throughout the period of study from 2009-10 to 2014-15. The lowest figure being ₹ 43999 million (negative) in 2013-14 and the highest figure being ₹ 49569 million (positive) in 2014-15, constituting a range of ₹ 93568 million. In The index number of IVA also marked a fluctuating trend. It was 100 in 2009-10, being the base year, while it increased to 123.46 in 2010-11 but it decreased to 121.74 in the next year i.e. 2011-12. Though in 2009-10 the figure of IVA is ₹ 22064 millions but it increased to ₹ 49569 millions in 2014-15 showing an incensement of 124.66%.

**TABLE 1: HINDUSTAN PETROLEUM CORPORATION LIMITED INTELLECTUAL VALUE ADDED STATEMENT [2009-10 TO 2014-15] (Rs.in million)**

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>(A) Generation of Intellectual Value Added (IVA)</b>						
Intellectual Value Added [IVA]	22064	27240	26860	40455	(43999)	49569
Indices of IVA [2009-10 = 100]	100	123.459	121.7368	183.353	(199.415)	224.6601
<b>(B) Allocation of IVA Group-wise</b>						
(i) Management	3910	21292	18612	25651	(30308)	31289
(ii) Non-Management	18154	5948	8248	14804	(13691)	18280
Intellectual Value Added [IVA]	22064	27240	26860	40455	(43999)	49569

Source: Computed and Compiled on the basis of information available in Annual Reports of HPCL from 2009-10 to 2014-15

Since, the figure of IVA has shown a fluctuating trend throughout the study period, hence null hypothesis (H0) is rejected and alternate hypothesis (H1) is accepted. This study shows that company is not utilizing its resources to their full potential. In year 2011-12, IVA decreased from the previous year. And in year 2013-14, it turned out to be negative. But if we see in overall, IVA increased from 22064 in 2009-10 to 49569 in 2014-15. So although company is cautious and improving on utilization of its human resources, but still it's not consistent in churning best out of its employee's intellectual capabilities (as evident from IVA figures of 2011-12 and 2013-14). The company should take proper steps to keep its performance standards consistently high in future.

**CONCLUSIONS**

The intellectual value added reflects the ability of employees to create value by their intellectual abilities. Intellectual value added grows when the organization make more and more use of people's knowledge. This paper begins with the concept of intellectual value added and analyzed how it is allocated between different employee's group. It collected the financial statements of Hindustan Petroleum Corporation Ltd. for six years and restated them into intellectual value added statements. This study establishes that in HPCL, IVA showed a fluctuating trend throughout the study period. Intellectual value added is a gesture to demonstrate organization's efficiency of using employee's intellectual capabilities. Further research in this area is needed to understand intellectual value added by public sector undertakings and private sector undertakings. This study work can be of immense benefit for an organization to make calculative decisions on human resources.

**REFERENCES**

1. Annual Reports and Accounts, HPCL, 2005-06 to 2011-12.
2. Awad, Elias M. and Ghaziri, Hassan M., (2004), "Knowledge Management", Sheel Print N Pack.
3. Bahar Kaya, Funda, Guzel Sahin, Gonca and Gurson, Poyraz (2010), "Intellectual capital in organizations", Problems and Perspectives in Management, Volume 8, Issue 1, p.156
4. Chatzkel, Jay L. (2003), "Knowledge Capital", Oxford University Press, p. 166
5. Mook, Laurie Ingrid, (2007), "Social and Environment Accounting: The Expanded Value Added Statement", Ontario Institute for Studies in Education of the University of Toronto.
6. Pandurangarao, Dasari, Basha, S. Chand and Devarapallirajasekhar (April 2013), "A Study On Human Resource Accounting Methods and Practices In India" IJSSIR, Vol. 2 (4), pp.96.
7. Stewart, Thomas A. (1998), "Intellectual Capital", Nicholas Brealey Publishing, p.87-88
8. Yogesha, B.S. and Mahadevappa, B. (Nov. 2014), "Analysis of Value Added Ratios of Indian Oil Corporation Ltd." IOSR Journal of Humanities and Social Science, Volume 19, Issue 11.

**WEBSITE**

9. [www.cpavision.org](http://www.cpavision.org)

## EMERGENCE AND GROWTH OF BIG DATA IN E-GOVERNANCE OF INDIA

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## ABSTRACT

E-Governance has been implementing almost all over the world to make the governance more responsible, reliable and transparent for the citizens' welfare. Although, the successful implementation of e-Governance is the main difference among the developed, developing and under developed countries. But the advancement in the field of science & technology under the edges of ICT has made citizens more tech-savvy as they use maximum online real-time data to express their opinion or views. Their anticipation and participation generates huge data sets that can be textual, pictures, drawings, audio-video messages. These data sets are of high importance for government, as these data sets may need to be reused for future references. However, the enormous size and speed upon which this data is increasing is very difficult to manage through traditional database systems. Thus the term Big Data came into existence whose analytic techniques help to manage and process such structured or unstructured data sets. This paper studies and highlights the various issues in traditional e-Governance database system and throws the light on the growth and emergence of data processing using Big Data in e-Governance of India.

## KEYWORDS

big data, e-governance, parallel processing, process re-engineering, unstructured data.

## 1. INTRODUCTION



e-Governance refers to the process of delivering govt. services and exchange of information electronically.

FIG. I



Through advertisements, workshops, seminars etc, Indian govt. is encouraging interactive medium for bridging the gap between govt. and citizens to make the govt. transparent, responsible and accountable. They have computerized all the portfolios, providing real-time data to the citizens. It is also encouraging PPP (Public Private Partnership) by indulging private sectors in making, updating and maintaining the ICT infrastructure nationwide. They have made various center level and state level agencies, organizations, R & D Centers like NIC, DIS, CIS, CDAC, SWAN etc to deal and manage the e-Governance data. But with the passage of time, the data being produced by them is growing at such a greater speed that the Big Data Analytic techniques are the best solution to store, retrieve and process mixed data sets at a very fast speed.

## 2. REVIEW OF LITERATURE

The review of literature reveals that Indian e-Governance is evolving constantly. According to the United Nations e-Governance Survey – 2012, e-Governance in India is constantly progressing and stands at No. 2 after China in the list of densely populated countries worldwide. According to the **Gartner's Maturity Model of e-Governance**, India has been passing through its III<sup>rd</sup> stage (vertical integration) with its face towards IV<sup>th</sup> stage (**horizontal integration**) where different departments can access and share common database(interoperability).

The websites detail of different portfolios running under govt. are as follows:

TABLE 1

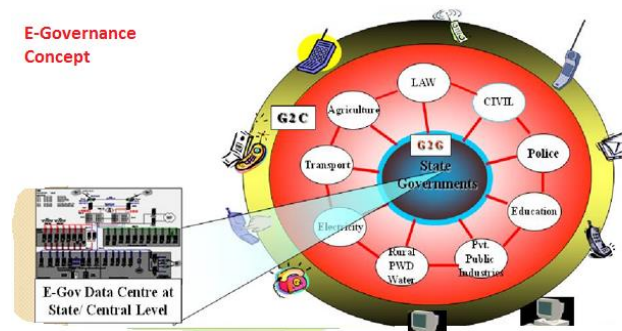
S.No	Portfolios	Website
1.	PM office	<a href="http://pmindia.gov.in/en/">http://pmindia.gov.in/en/</a>
2.	Ministry of Home Affairs	<a href="http://www.mha.nic.in/">http://www.mha.nic.in/</a>
3.	Ministry of Finance	<a href="http://finmin.nic.in/">http://finmin.nic.in/</a>
4.	Ministry of Cultural Youth and Sports	<a href="http://www.indiaculture.nic.in/">http://www.indiaculture.nic.in/</a>
5.	Ministry of Defense	<a href="http://www.mod.nic.in/">http://www.mod.nic.in/</a>
6.	Ministry of Communication	<a href="http://www.dot.gov.in/">http://www.dot.gov.in/</a>
7.	Ministry of Human Resource Development	<a href="http://mhrd.gov.in/">http://mhrd.gov.in/</a>
8.	Ministry of Foreign Affairs	<a href="http://www.mea.gov.in/">http://www.mea.gov.in/</a>

The Indian government has also developed a national portal <http://india.gov.in> that provides various links to deal or access govt. services running nationwide for the citizens' help and welfare. **Let us discuss the initiatives taken by Indian government that are generating huge data sets:**

- ❖ Digital India - a government initiative to integrate all portfolios and to provide all government services under one umbrella
- ❖ Adhar Card – world's largest ID database platform to create digital identity for each Indian
- ❖ Science & Technology - research work carried out in the field of medicine, astrophysics, materials science, earth and atmospheric observations, energy, computational biology, bioinformatics, cognitive science, statistics etc., generate huge data sets of different types.

Moreover, **black box data, social networking websites, stock exchange, sensors, search engines** are the other popular resources for producing huge data sets of mixed type, Fig - II. Thus to deal with such a huge data, Big Data came into existence.

FIG. II



**2.1 WHAT IS BIG DATA:** Big Data means a data that is really very big in size, Fig-III. The data received by govt. departments can be in the form of text, pictures, videos, audio etc.

FIG. III

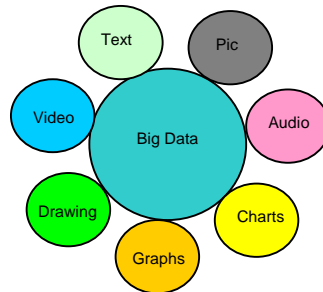


FIG. IV



Thus, the major problem to deal with such data is – type of data, Fig-IV. The data can be one of the following types:

- ❖ **Structured data** i.e well-formed data that can be stored on various types of databases
- ❖ **Semi structured data** i.e XML codes that have tags and attributes specified by users
- ❖ **Unstructured data** i.e audio-video messages, pictures etc.

The traditional database systems are inefficient to store such a heterogeneous data or to retrieve specific data at a great speed from such data sets. To overcome these issues, Big Data Analytic Techniques came into existence.

It uses distributed parallel processing where data is stored on multiple servers, which further encourages parallel processing and fast retrieval of data from the stored data sets.

**2.2 CHARACTERISTICS:** The basic characteristics of Big Data are as follows:

1. **Volume** i.e the huge amount of data is generated every day and expanding rapidly
2. **Variety** i.e the type of data can be audio, video, text, image or mixed
3. **Velocity** i.e the speed at which data is produced or processed
4. **Veracity** i.e the quality or accuracy of data

Big data helps to deal, store, process and retrieve very large and different type of real time data sets. As Indian govt. is also taking steps to make our India as a Digital India, they need to use big data analytics to store, process and retrieve large data sets.

### 3. OBJECTIVES

Basic objectives of this paper are as follows:

1. To study the necessity and use of Big Data in e-Governance
2. To identify the issues in traditional e-Governance system
3. To compare the new system with traditional database system

### 4. HYPOTHESIS

Two basic hypothesis that have been framed to study the above said objectives are as follows:

#### HYPOTHESIS - I

H<sub>0</sub>: There is no significant growth of E-Governance in India due to ICT.

H<sub>1</sub>: There is significant growth of E-Governance in India due to ICT.

#### HYPOTHESIS - II

H<sub>0</sub>: There is no significant need or importance of Big Data concepts towards the successful implementation of E-Governance.

H<sub>1</sub>: There is significant need or importance of Big Data concepts towards the successful implementation of E-Governance.

## 5. RESEARCH METHODOLOGY

To study these objectives, **Analytical method** has been used where data about e-Governance, role of Big Data and the difference between traditional database processing system and Big Data analytic techniques are analyzed and compared.

**5.1. SOURCE OF DATA:** To study these objectives, secondary data has been collected from various Internet journals, govt. websites and newspapers to check the overall development.

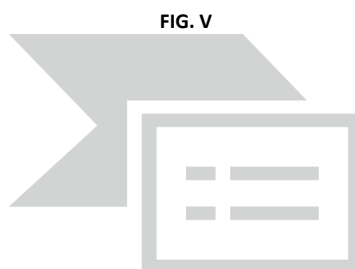
## 6. E-GOVERNANCE USING BIG DATA

**6.1 PROCESS RE-ENGINEERING:** Indian governments are constantly trying to restructure their processes to ensure the socio-economic-political growth of the country. The study reveals that the states like **Karnataka, Andhra Pradesh, Madhya Pradesh, Maharashtra, Gujrat, Rajasthan, Tamilnadu etc.** are among those states that have been successfully running e-Governance projects. Let us have a glance on the reforms incorporated by the Indian govt.:

- Establishing dedicated center level organizations for the research projects and development of e-governance like NIC, NeGA, CSC, CDAC
- Establishing various state level organizations to co-ordinate and develop e-governance in respective states
- Enactment of ICT Act (during 1990s), to develop communication nationwide
- Making IT Act (during yr. 2000) to protect transactions (data) from intentional / unintentional loss or theft
- Passing of RTI Act (during yr. 2005) to encourage the citizens and to make public agencies more accountable and responsible
- Funds and subsidies to various e-governance projects
- Encouraging private sector to participate and invest money in e-governance projects through PPP
- Taking the services from Technical Experts
- Encouraging International trades and treaties with various countries and World bank to help and support e-governance.

All these factors have made various e-Governance Mission Mode Projects (MMPs) successful thus ensuring the socio-economic-political reforms. However, online banking, land reforms, UID card, radio-frequency identification (RFID) readers, wireless sensor network etc are the other few examples ensuring success of e-governance in India. But these changes are generating huge data sets which may be used as and when required. According to a survey, 2.5 quintillions[8] bytes of data is produced in one day and more than 90% of the total data has been produced in the last two years. Thus, the database is expected to be smart enough to store, process such interrelated but mixed data sets to obtain meaningful information. **And the answer to all these requirements is Big Data.**

**6.2 WORKING OF TRADITIONAL DATABASE SYSTEM:** In the early days of computation, RDBMS was the first and foremost choice of every organisation as it was easy to learn and understand as well as powerful enough to store huge amount of data, Fig-5



Oracle, SQL Server, DB2 etc are a few examples of popular RDBMS. However, these applications were developed to deal with structured type of data where all the data is stored at central computer and all other share and process the data from that common place. This technique is good only for statistical analysis using structured queries. Review of literature reveals that many e-governance services are designed to deal with structured data sets, processed through statistical measures but could not help in finding out the future aspirations or critical challenges.

**6.3 TYPE OF BIG DATA ANALYTICS:** In order to overcome the shortcomings from the traditional database systems and to fulfill new requirements, new technologies came into existence that are much more efficient in storing, processing and retrieving massive amount of data sets at a great speed, for example: NoSQL, MongoDB, Hadoop etc. Various vendors are available with different products to deal with Big Data like Amazon, IBM, Microsoft etc. But before selecting the appropriate technology requirement of any system, one should understand the type of their big data (structured / unstructured / mixed), size, speed etc. After analyzing the Big Data, we can classify it into two types:

(i) Operational Big Data (ii) Analytical Big Data

(i) Operational Big Data: Operational Big Data as its name is indicating is designed to deal with real-time data that need to support concurrent users at a great speed. These techniques deal with structured data sets. NoSQL, MongoDB technologies are the most appropriate, to deal with the operational big data sets. These technologies have been designed to overcome the shortcomings of relational database management systems in dealing big data. NoSQL uses **Cloud service** that is faster, quicker and inexpensive to store, retrieve and process huge data sets. This is the open source and can be easily downloaded from the Internet. Sometimes, they may provide patterns/trends data followed by their follow users that further helps in decision making.

(ii) Analytical Big Data: This technique is basically designed to deals with unstructured data sets at a great speed and accuracy. Unlike traditional RDBMS, these systems support Massive Parallel Processing (MPP) where the data sets are stored on various commodity hardware along with Map Reduce algorithm to process unstructured data sets at a great speed and accuracy for example, Hadoop.

Let us compare and contrast the Operational and Analytical Big Data:

TABLE 2

Measuring Factors	Operational	Analytical
Latency	1 ms – 100 ms	1 min – 100 min
Concurrency	1000- 100,000	1 – 10
Access Patterns	Both Read and Write	Only Read
Data	Structured	Both Structured, Unstructured
Queries	Selective	Unselective
Data Scope	Operational	Retrospective
End User	Customer	Data Scientist
Technology	NoSQL, MongoDB	Hadoop(MPP + Map Reduce)

There can be a situation where a company needs both operational and analytical techniques together to deal with its data sets. The technocrats have provided the solution to this problem by integrating the MongoDB and Hadoop through an API. This technique provides the quality speed, storage and processing power of MongoDB and analytical, decision making skills of Hadoop.



FIG. VI



Thus, we can conclude that Operational and Analytic techniques complements to one another.

**6.4 DIFFERENCE BETWEEN TRADITIONAL DATABASE SYSTEM AND NEW SYSTEM:** Let us understand the difference between traditional database system and new Big Data system.

TABLE 3

TRADITIONAL DATABASE SYSTEM	BIG DATA SYSTEM
It refers to the collection of structured data sets having predefined data types and values.	It refers to the collection of structured data sets, unstructured or semi-structured data sets.
It stores terabytes of data.	It stores enormous data sets.
Here data value is text-oriented.	Here data value can be an audio, sound, video file, text or pictures etc
Simple statistical operations are performed very easily under some known conditions.	It is mainly useful to get unknown data from the given data sets or to explore new market trends etc.
It works on establishing relationship between two or more tables, generate queries to find the required results.	It works on heterogeneous types of data that is very difficult to correlate.
It works on operational type of data.	It works on analytical type of data.
It is simple and easy to understand.	It needs expert person to interpret the results produced from heterogeneous data.

## 7. FINDINGS

E-governance has been implementing nationwide in India. Due to the ICT development, many electronic services like e-governance, e-commerce, e-reservation, e-registration, Digital Lockers, online banking, online education, virtual labs, social networking website have been used almost all over in India. Traditional database systems had been designed to store and process structured well-formed data sets. But data can be in the form of text, pictures, audios or videos or a mixed data. As the requirements have been changed, Big Data Analytics has become the foremost solution to store and retrieve huge data sets.

## 8. RECOMMENDATIONS & SUGGESTIONS

Thus, we find that Big Data helps to do massive parallel processing (MPP) on the unrelated data sets to get overviews about the current trends which further effects the decision makings. Along with this, the Big Data Analytic technique are the open source, can be easily downloaded and used. It also provides cloud storage. Thus this technique is well-suited to fulfill the future-aspirants of e-governance in India.

## 9. CONCLUSION

On the basis of the study, it has been found that E-Governance is growing significantly due to the revolution of ICT. But the traditional relational database systems are not well-suited to store, retrieve and process huge data sets of e-governance projects. On the other hand, Big Data uses commodity hardware to store the chunks of data and provide parallel processing to get the results from un-related data sets at a faster speed. However, the selection of big data technique (operational type or analytical type) depends upon the current projects' requirements. Thus, Big Data is the need of hour for our future digital India.

## 10. LIMITATIONS

Let us understand the basic threats or limitations found out while analyzing the growth of e-governance and Big Data:

- ❖ Expensive and high quality hardware required
- ❖ Require technical expertise for hands-on
- ❖ Security threat as data is stored on some private clouds
- ❖ More prone to data theft

## 11. SCOPE OF FUTURE RESEARCH

We will try to find out the scope of various Big Data Analytic techniques, their scope, usage and impact on the efficient and effective implementation of e-governance in India.

## REFERENCES

1. S. Kumar, H. Aggarwal (2012), "Impact And Scope of e-Governance Initiatives in State of Punjab(India)", [www.ijcaonline.org](http://www.ijcaonline.org) > Archives > Volume 44 > Number 14
2. [www.jatit.org/volumes/research-papers/Vol17No1/5Vol17No1.pdf](http://www.jatit.org/volumes/research-papers/Vol17No1/5Vol17No1.pdf)
3. M. S. Haque (2002), "E-Governance In India: Its impacts on relations Zmong Citizens, Political and Public Servants", [ras.sagepub.com/content/68/2/231.refs](http://ras.sagepub.com/content/68/2/231.refs)
4. SAMEER SACHDEVA (2002), "E-Governance Strategy in India", <https://pdfs.semanticscholar.org/3209/dc5f508eabaef5d37e01f28f288b462d5d4e.pdf>

5. <http://www.hss.iitm.ac.in/rt-ppp/PPPs/ Presentations/ PPP%20for% 20accelera ted%20Infrastructure%20dvlp t%20in%20India.pdf>
6. Reserve Bank of India Occasional Papers, Volume 29, No. 1 Summer 2008, "Public Private Partnership in Indian Infrastructure Development: Issues and Options", <https://www.scribd.com/document/181754960/ppp1-pdf>
7. [http://en.wikipedia.org/wiki/Public%E2 %80%93private\\_partnership](http://en.wikipedia.org/wiki/Public%E2 %80%93private_partnership)
8. [www.rbi.org.in/scripts/BS\\_VIEWContent.aspx?ID=1912](http://www.rbi.org.in/scripts/BS_VIEWContent.aspx?ID=1912)
9. <http://www.pppindiadatabase.com/ Uploads/Status%20of%20 PPP %20 Projects%20 as%20 on%20July %2031,%202011.pdf>
10. <http://www.pppindiadatabase.com/ Uploads/Master%20List%20PPP%20 Projects%20in%20India%20as%20 on%20 Janu ary %2031,2011.pdf>
11. India's love affair with public-private-partnership faces a stern test, *Viwed* on 2015, <http://www.economist.com/news/finance-and-economics/21568397-indias-love-affair-public-private-partnerships-faces-sterne-test-ripp>
12. List of Indian States and Union Territories by GDP, *Viwed* on Nov 2016, [http://en.wikipedia.org/wiki/List\\_of\\_Indian\\_states\\_by\\_GDP](http://en.wikipedia.org/wiki/List_of_Indian_states_by_GDP),
13. Indian states ranking by literacy, by National Family Health Survey, *viwed* on July 2016, [http://en.wikipedia.org/wiki/Indian\\_states\\_ranking\\_by\\_literacy\\_rate](http://en.wikipedia.org/wiki/Indian_states_ranking_by_literacy_rate), Indian states ranking by literacy rate, by National Family Health Survey
14. Poverty In India, *Viwed* on August 2016, [http://en.wikipedia.org/wiki/Poverty\\_in\\_India#Reserve\\_Bank\\_of\\_India\\_.282012.29](http://en.wikipedia.org/wiki/Poverty_in_India#Reserve_Bank_of_India_.282012.29)
15. United Nations E-Government Survey 2012, *Viwed* on Sept 2016, <https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2012-Survey/Chapter-1-World-e-government-rankings.pdf>
16. UN E-Government Survey: Public Administration and Development(2016), *Viwed* on Oct 2016, <https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2016-Survey/Chapter%201.pdf>
17. Indraneel Ghosh, "Indian Government Initiatives For Big Data", *Viwed* on Dec 2016, <https://globalstatement2015.wordpress.com/2015/08/12/big-data-in-india-the-governmental-intervention/>
18. George, Rommel, Steve, Charles, Justin(August 2015), "Understanding The Big Data World", *Viwed* on Oct 12, 2016, <http://www.pearsonitcertification.com/articles/article.aspx?p=2427073&seqNum=2>
19. Anne Shields(July 2014), "Why Traditional Database System Fails to Support Big Data", *Viwed* on October 2015, <http://marketrealist.com/2014/07/traditional-database-systems-fail-support-big-data/>
20. Big Data, *Viwed* on August 2016, [https://en.wikipedia.org/wiki/Big\\_data](https://en.wikipedia.org/wiki/Big_data)
21. Rajagopalan M. (2013), "Big Data Framework For National E-Governance Plan", <https://www.researchgate.net/publication/269406616>
22. Ben Walker(April 2015), "Every Day Big data Statistics-2.5 Quintillion Bytes of Data Created Daily", *Viwed* on Sept 2016, <http://www.vcloudnews.com/every-day-big-data-statistics-2-5-quintillion-bytes-of-data-created-daily/>
23. Big Data Explained at mongodb.com, *Viwed* on October 10, 2016, <https://www.mongodb.com/big-data-explained>
24. Operational Vs Analytical Big Data at mongodb.com, *Viwed* on January 21, 2017, <https://www.mongodb.com/scale/operational-vs-analytical-big-data>
25. Ray Poynter (Oct 2013): Big Data successes and limitations: What researchers and marketers need to know, *Viwed* on January 21, 2017, <https://www.visioncritical.com/big-data-successes-and-limitations/>

**A STUDY ON SHAREHOLDERS' WEALTH MAXIMIZATION OF MUTHOOT FINANCE LIMITED****L.PRRABHA****ASST. PROFESSOR****DEPARTMENT OF B.COM (PA)****PSGR KRISHNAMMAL COLLEGE FOR WOMEN  
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COIMBATORE****ABSTRACT**

*Shareholders wealth maximization is the attempt by business managers to maximise the wealth of the firm. In this article, we suggest necessary steps to enlarge Muthoot Finance company's wealth. To make our case, we used capital structure and trend analysis. Their problem is uncontrollable expenses. For that we gave suggestions regarding the maintenance of expenses in a proper way. Finally, the suggestions are offered to improve the wealth of the company.*

**KEYWORDS**

trend analysis, capital structure and shareholder's wealth maximization.

**INTRODUCTION**

**W**ealth maximization is a modern approach to financial management. Maximization of profit is used to be the main aim of a business and financial management till the concept of wealth maximization came into being. It is a superior goal compared to profit maximization as it takes broader arena into consideration.

It is defined as the present value of the expected future returns to the owners of the firm. These returns can take the form of periodic dividend payments and/or proceeds from the sale of the stock.

Shareholders wealth maximization is the attempt by business managers to maximize the wealth of the firm they run, which results in rising stock prices that increases the net worth of shareholders

**COMPANY PROFILE**

Muthoot Finance Limited is an Indian financial corporation. It is known as the largest gold financing company in the world. In addition to financing gold transactions, the company offers foreign exchange services, money transfers, wealth management services, travel and tourism services, and sells gold coins at Muthoot Finance Branches. The company's headquarters are located in Kerala, India, and it operates over 4,400 branches throughout the country. Outside India, Muthoot Finance is established in the UK, the US, and the United Arab Emirates. While the company falls under the brand umbrella of the Muthoot Group, its stocks are listed on the Bombay Stock Exchange (BSE) and NSE. As of March 2012, revenue (after expenditure) stood at more than Rs. 23,000 crore (\$4.2 billion). The target market of Muthoot Finance includes small businesses, vendors, farmers, traders, SME business owners, and so on.

**STATEMENT OF THE PROBLEM**

Shareholders are the anonymous title holder of the company. They have an influential part in company's wealth. Shareholders tend to show interest only when the wealth of the company is at its maximum. Eventually, the shareholders wealth increases proportionate to the increase in the wealth of the company. When the company's wealth is maximized, it is benefited for the shareholders. Muthoot Finance is one of the trusted finance diversified brand in the country. They are specially designed for the working for the wealth of the shareholder. They also have an option for trading in online platforms offered by banking instructions. On those crucial grounds we make choice to designate a project on this company.

**SCOPE OF THE STUDY**

This study mainly attempts to analyse the financial performance of the company. The present study develops a financial analysis for owner's equity and its development. The study forecast to evaluate how to increase the company profit.

**OBJECTIVES OF THE STUDY**

1. To determine the value of trend for past 5 years.
2. To compare the income statement and Balance sheet of Muthoot Finance for the past 5 years.
3. To study the financial position of the business using comparative statement and trend Analysis.

**TOOLS USED**

1. Trend Analysis
2. Capital Structure

## LITERATURE REVIEW

**Bernard Sharfman** has done a study on shareholder wealth maximization and its implementation under corporate law. The article takes a very traditional approach he analysed with an approval that codes have historically been very hesitant to participate in the process of determining if a corporate decision is wealth maximizing, the creation and application of corporate law involves an enduring struggle to find the optimal amount of decision making in the context of a maximizing shareholder wealth.

**R. Muruga ganesh, Dr. A. Somu and V. Mathivathani** has done a research on a comparative study on wealth maximization in selected automobile industries. The problem taken for this research is that due to the fluctuations in the market price of shares. It is essential to measure the wealth created by the organisation. In this research six financial tools have been used to analyse the data. Finally, based on the analysis the researcher has compared wealth creations on selected organisations and suitable suggestion have been given to the selected organization and also for the investors.

## RESEARCH METHODOLOGY

Data obtained secondary data collected from website.

## PERIOD OF THE STUDY

The period of study is from 2012 to 2016 (5 Years)

## ANALYSIS AND INTERPRETATION

### TREND ANALYSIS

Trend analysis involves the collection of information from multiple time periods and plotting the information on a horizontal line for further review. The intent of this analysis is to spot actionable patterns in the presented information.

When trend analysis is being used to predict the future, keep in mind that the factors formerly impacting a data point may no longer be doing so to the same extent. This means that an extrapolation of a historical time series will not necessarily yield a valid prediction of the future. Thus, a considerable amount of additional research should accompany trend analysis when using it to make predictions.

**TABLE 1.1: TREND PERCENTAGE (2012-2106)**

YEAR	SHARE CAPITAL		NET PROFIT	
	Rs.	Trend percentage	Rs.	Trend percentage
2011-2012	371.71	100	892.02	100
2012-2013	371.71	100	1004.24	112.58
2013-2014	371.71	100	780.07	87.45
2014-2015	392.97	105.71	670.52	75.17
2015-2016	399.00	107.33	809.55	90.75

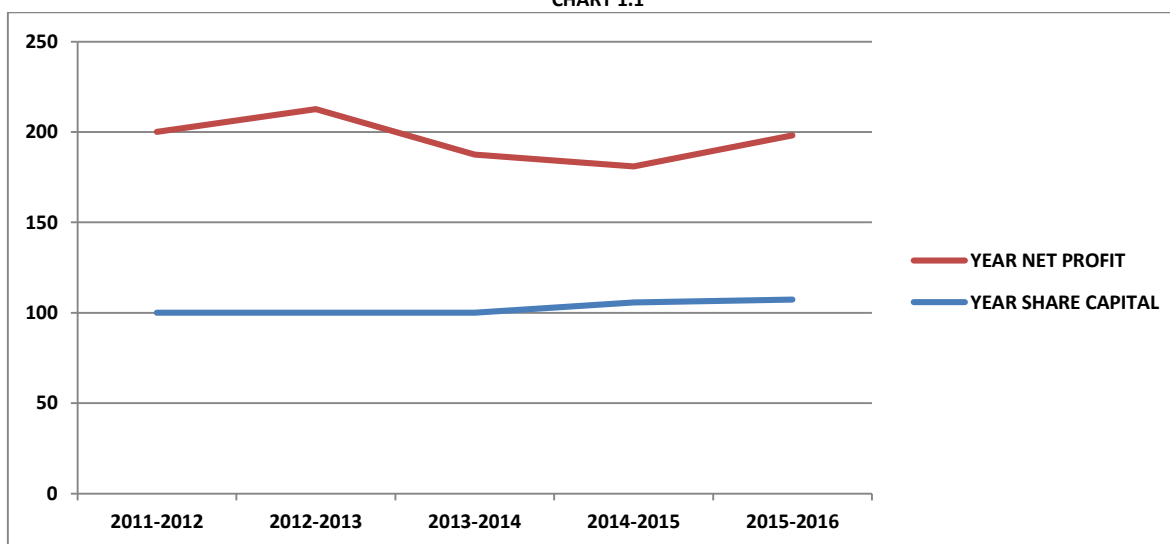
Source: www.profit.ndtv.com

The above trend table state that there is no rise in share capital as up to 2014 and its gradually increased in the year 2015 & 2016 from 100% to 107.33%.

As profit is trend is concerned from 2013 there was a great increase in profit to 12% but while seeing 2014 & 2015 there is a steep decrease in the profit ratio to 75.17%. But in 2016 again the profit is boosted up to 90.75.

It shows that share capital trend is in increasing point and profit trend is at fluctuations of increasing and decreasing.

**CHART 1.1**



### CAPITAL STRUCTURE

Planning the capital structure is an important area of financial decision making. The finance manager has to select long-term sources of funds in such a way that the capital structure is optimum. The raising of more debt may help to improve the return to shareholders. But it will increase the risk and the fixed interest charges. On the other hand, raising of funds through equity capital will bring in more permanent funds. The risk to the firm is also less, but the shareholders expect higher returns. Therefore, the finance manager has to strike a balance between various long-term sources with a view to minimise the overall cost of capital.

Here, the capital structure is found out to know about the value of the firm.

$$V = S + D$$

Here, V = value of the firm

S = market value of equity shares

D = market value of debt

To calculate v,

Earnings available to equity holders = EBIT – interest

Cost of equity ( $K_e$ ) = earnings per share / market value per share

Market value of equity shares = earnings available to equity share / cost of equity

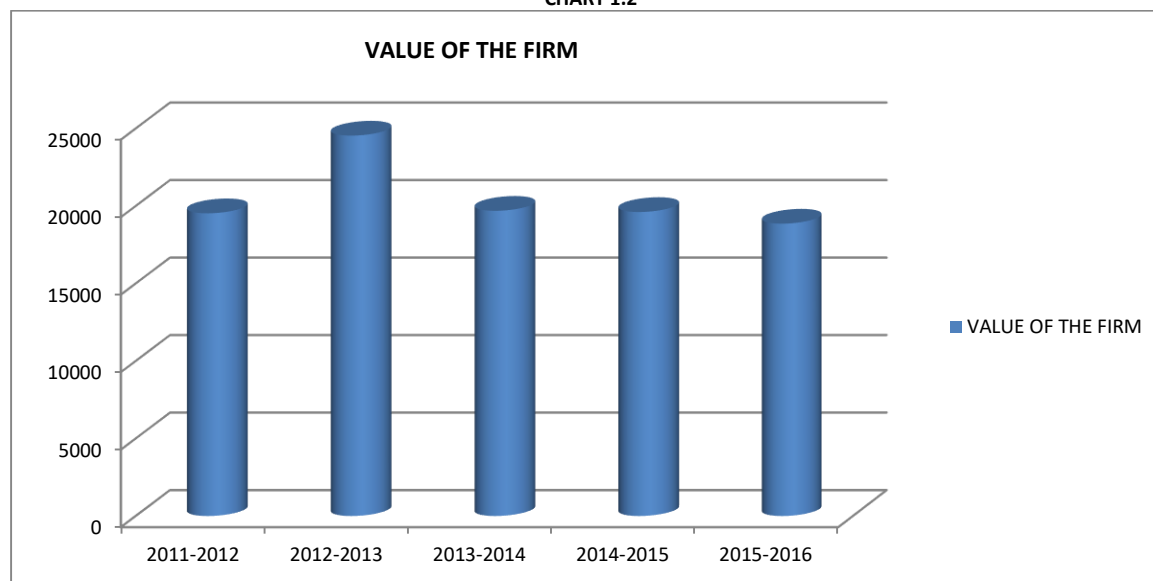
TABLE 1.2

YEAR	earnings available to equity holders	capitalization rate (%)	market value of equity shares	market value of debt	VALUE OF THE FIRM
2011-2012	1364.17	8.9	153.45	19376	19530
2012-2013	1556.89	9	173.76	24081	24542
2013-2014	1241.02	5.8	212.5	19478	19690
2014-2015	1111.98	6.3	176.23	19436	19612
2015-2016	1074.27	7.02	153.03	18567	18862

source: www.profit.ndtv.com

The table 1.2 shows, that the value of the firm has been increased in the year 2013 by 25.67% and then it has been decreased from 25.67% to 19.77% then to 0.39% then to 3.82% for 2014-2016.

CHART 1.2



## FINDINGS

The value of share capital has been increased by 7.33%. And the value of net profit has been decreased by 9.26%

The value of the firm has been increased in the year 2013 about 25.66%. And then it has been decreased from 25.66% to 23.14%

## SUGGESTIONS

By seeing the value of share capital it has been increased over the years, but when looking at the profit it has been decreased, to overcome this situation the company should give more attractive plans to increase customers only when the customers are interested to invest then only the wealth of the company will increase. The company should maintain the value of income and expenses in order to preserve the profit of the organization.

## CONCLUSION

The company concentrates on the wealth maximization of the concern, in muthoot finance the wealth of the company is good at the year 2013, but in 2016 due to decrease in the value of profit and increase in the value of dividend rate the wealth is minimised. If the company takes necessary measures to overcome the problem of operating expenses and concentrate on the maximization of profit the company will have a good initiative.

## REFERENCES

1. Florida Law Review, Volume 66, Issue 1 (2015).
2. Management accounting – Shashi K. Gupta
3. Research methodology – Kothari

## WEBSITES

4. www.investopedia.com
5. www.moneycontrol.com
6. www.profit.ndtv.com

# IMPROVING LIFE EXPECTANCY IN NIGERIA: INFORMATION AND COMMUNICATIONS TECHNOLOGY PANACEA TO HIGH CARNAGES IN ROAD TRANSPORT SYSTEM

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## ABSTRACT

*Different modes of transportation have existed from time immemorial and it has benefitted the generality of the populace in no small measure. Road transportation has grown to be the commonest in Nigeria. There is a very slim possibility of a human not making use of road transport at a point in time or the other. However, road transport accident has become the most rampant source of carnages when compared to the other modes of transportation in Nigeria. WHO ranks Nigeria 149<sup>th</sup> out of 178 member states in road accident occurrences. Nigeria again records 50% less in fatality cases from road accidents when compared to countries like Mexico, Indonesia and Turkey. Road accident victim's lateness in receiving emergency medical attention is one of the major causes of untimely death to many drivers and passengers as FRSC officers don't usually get reached in good time about accident cases for prompt rescue operations. Emergency Response Model was introduced to alert the nearest FRSC mobile unit of accident cases and feed them with the location of the victims. This is made possible by the combination of an efficient Vehicle Record Database, MEMS gyroscope and wireless communication devices. ERM simulation result shows that an instant rescue team is assured at accident scenes in no time wherever an accident occurs. This offers more hope of survival for rescued victims as prompt medical attention is guaranteed. Life expectancy which has dropped to 54 years in Nigeria can be increased with the adoption of ERM in Nigeria Road Transport System as carnages will definitely be reduced.*

## KEYWORDS

FRSC, accident, ERM, hospital, victims.

## I. INTRODUCTION

There is a low life expectancy in Nigeria when compared to other developing MINT (Mexico, Indonesia, Nigeria and Turkey) countries across the world. Many reasons are responsible for this but deaths during road accidents stand out clearly.

Over the years, transportation has liberated man and has made him more mobile. This has also made him to depend greatly on vehicular movements for his day to day activities. Road transport has the greatest of the pressure of all the modes of transportation available. Road traffic accident has however become a recurring decimal and its effects are usually colossal.

Road traffic accident has thus become an issue of great international concern as it has emerged as the single greatest source of death all over the world. Road traffic accidents and deaths have reached such an alarming proportion even to the point of sheer frustration and near helplessness. According to Federal Road Safety Corps (FRSC) (2012), Nigeria continues to feature in the bottom half of World Health Organization country rankings of road traffic accidents (WHO, 2014). Table 1 shows the trend of accident occurrence in Nigeria between 2007 and 2011.

**TABLE 1: ROAD TRAFFIC ACCIDENTS IN NIGERIA**

Year	Number of cases	Number of killed	Number of injured	Fatality rate per 100,000 Pop	Fatality rate per 10,000 vehicles
2007	8,477	4,673	17,794	9	NA
2008	11,341	6,661	27,980	6	NA
2009	10,854	5,693	27,270	5	NA
2010	5,330	4,065	18,095	4	NA
2011	4,765	4,327	17,464	4	6
Average	8,153	5,084	21,721	5	NA

Source: FRSC Documents, 2012

The country's 149th ranking in 2009 out of 178 member states indicates the hazards associated with road transportation in a country that is largely dependent on its road network for economic and social activities.

Asian countries like China, India and Indonesia with their teeming population possess better fatality indices even up to 50% less than Nigeria's statistics. Western countries on the other hand are rated even better, recording less than 10 deaths per 100,000 population on average, with even the UK having one of the lowest with only 5.4 deaths per 100,000 population (FRSC, 2012).

It is observed that lateness in receiving emergency medical attention of accident victims is one of the great impediments to the survival of accident victims in Nigeria. This challenge of lateness in receiving emergency medical attention has led to untimely death of many drivers and passengers as FRSC officers could not be reached in good time for rescue operations on accidents cases.



The use of Vehicle Accident Emergency Alert (VAEA) system; comprising of an efficient vehicle record database, MEMS gyroscope sensors and wireless communication devices is therefore inevitable in order to address the problem.

This proposed system would capture details of all registered vehicles and track the location of the vehicle when the accident occurs using GPS (global positioning system). Whenever a critical accident occurs, the vehicle sensor would send an alert to the nearest FRSC office which later forwards the necessary information to the nearest mobile FRSC unit. This unit eventually locates and transports the accident victims to the nearest hospital for emergency medical care.

Despite the fact that FRSC is saddled with the responsibility of rescuing accident victims, there is still a limit to their output without an appropriate means through which they can obtain an instant notification about accident incidents.

VEAS therefore is seen to be highly critical in enhancing transportation system in Nigeria; this is because when more lives are saved from road accidents, mortality figures would be reduced on the roads, and this would in no small measure improve the road transportation traffic as passengers' confidence would be boosted.

## II. SOME ICT INTERVENTIONS IN ROAD TRANSPORT

Improvement and security in road transportation are clearly unachievable outside the adoption of ICT. Unimaginable landmarks have been recorded in recent years. These encouragements have spurred further interest in researches towards a secured road transportation in Nigeria.

The following are some of the technologies/solutions that have been proffered in the past:

### A. INTELLIGENT TRANSPORT SYSTEM (ITS)

Safety of traffic participants is one of the most important consequences of the intelligent transport system (ITS's) implementation, providing a regulatory and a societal impetus to the program with a national backing. The main objective of providing an ITS interface is to set up a national, multi-modal surface transportation system that features increased connectivity of transportation environment among vehicles providing the infrastructure, and portable devices to serve the public good by leveraging technology to maximize safety, mobility and environmental performance. Various technologies that are a part of ITS deployment have been studied to give the readers a comprehensive view of the intelligent transport system.

The concept of an intelligent vehicle consists of equipping the vehicle with an optimum number of sensors such as radars in order to perceive the surroundings and hence ensure an automatic guidance control of the vehicle and maintain communication with the external environment. Such a framework is more secure if communication between nearby vehicles is established and maintained. This enables, for example, the driver of a car to be aware at an early time of the emergency breaking of the preceding vehicle (in case of the presence of an obstacle in front of this vehicle) and so to avoid a collision. Thus the collision avoidance system is an information-communication technology system for early warning and collision avoidance on roads and motorways using special sensor network, which is spanned over the moving vehicles and road obstacles – transmitting automatically warning signals to the back of a column and enables distant drivers to stop in time or to do such operations automatically. V2I safety application include a broad range of capabilities from the transmission of the status of traffic signals on the road ahead in order to alert drivers of the need to apply their brakes, to driving conditions (low visibility or icy pavements), to variable speed limits (Jonathan, 2010). Intelligent Transport Services (ITS') are multi-modal and the platform can be easily set up for carriers, transit, passenger and freight rail, pedestrian and bicycle thus offering mobility enhancement and environmental improvement as other benefits.

### B. NAVIGATION SYSTEM

Geographic positioning systems (GPS) in conjunction with geographic information systems (GIS) offer the possibility of decreasing the amount of time spent on search behavior by motorists. Assuming one inserts his/her origin and destination to the system, the shortest route will be proposed. Such navigation systems are already common today, either portable or fixed (in-built in the car). The use of mobile communication in route advising seems underestimated for private car use and deserves more attention (Townsend, 2004). Systems that optimize route choice have seldom the primary aim of reducing the environmental effects of driving (lowest total fuel consumption) instead of the traditional aim of shortest time or distance. In a study of real traffic driving patterns in the city of Lund, Sweden, the most fuel-economic route was extracted and compared with the original route choice (Ericsson et al., 2006). It was found that the drivers' route choice produced trips that could save 8.2% fuel by using a fuel-optimized navigation system. This corresponded with 4% fuel reduction for all journeys longer than 5 min. in Lund.

**WEAKNESS:** When using a navigation system, you are distracted from driving. You have to continuously glance at the screen, when you should be watching the road.

### C. FUEL-INTELLIGENT VEHICLES

The demand for fuel-efficient cars has been growing in the previous year's driven by the increased and still increasing price of oil. Hybrid electric cars have already found presence in the marketplace due to the promise of saving fuel by using an electric motor in place of the internal combustion engine during particular stages of driving. All the major car manufacturers have developed or are currently developing hybrid vehicles, with the earlier models being relatively small, like the Toyota Prius and Honda Insight and Civic, and larger model being currently released, like a hybrid Ford Escape and various Lexus models. Despite fuel savings, the primary disadvantage of the hybrid technology from an adoption perspective is the initial cost for consumers that can be as much as 70% more than an equivalently powered internal combustion engine-only vehicle (Manzie et al., 2007). At the same time, fuel-intelligent cars are being developed equipped with a relatively cheap sensor network.

Fuel consumption in urban environments is up to 50% higher than on highways, whereas one of the largest contributors to fuel use in urban areas is the stop-start behavior of traffic flow. This phenomenon provides possibilities to address this area using ICT. Through the use of ICT, vehicles can communicate with the road infrastructure and other vehicles to obtain essential information to adjust driving behavior. In recent simulation studies, using different times of preview information, it appeared that fuel savings could be achieved between 15 to 25% with 60 seconds preview and up to 33% with 180 seconds preview relative to an 'un-intelligent' baseline car. The development of a combined hybrid and ICTs equipped intelligent vehicle seems still under way with the optimal use of feed forward information as an ongoing research problem (Manzie et al., 2007).

**WEAKNESS:** The initial cost for consumers can be as much as 70% more than an equivalently powered internal combustion engine only vehicle.

### D. VIDEO SURVEILLANCE RESPONSE

Several cities maintain a continuous monitoring of key network locations to determine if traffic is moving or encountering congestion. Such monitoring can be done with strategically located sensors or television cameras. If flow interruptions are apparent they are usually caused by a disabled vehicle according to traffic vision. Once these events are perceived, a repair/assistance vehicle is dispatched to the location. Upon arrival at the problem site, the objective is to remove the obstacle to flow and offer assistance (tire replacement, and so forth) or transport to the motorist.

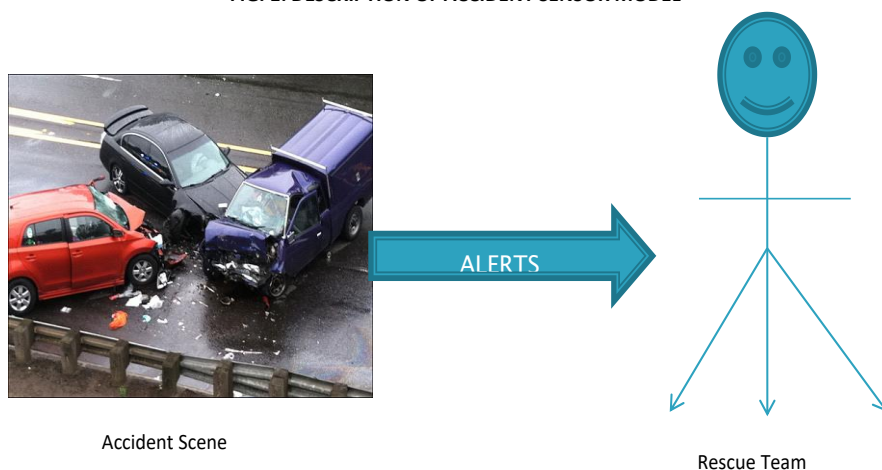
### E. ADVANCED TRAVELER INFORMATION SYSTEMS

Personal information systems may take different forms and may be in-vehicle for car drivers and portable for passengers using public transport (Black, 2006). Based on real-time information, the best route and connections (in public transport) are given. In advanced modes, opening times of facilities (shops, services, etc.) and the length of stays are used as an input, enabling an overall space-time optimization of activity chains. In the case of interruption (accident, congestion, etc.) new travel solutions are produced. Adoption of such traveler assistants - that are currently in an experimental stage - may be hampered by high costs but also by limited needs of travelers to plan their activity and traffic chains.

## III. EXISTING MODEL

In the immediate past, cars use sensors that have the capacity to inform the rescue team about accident occurrences. The model however does have in its plan how rescue operations can be done seamlessly. All the model does is just to notify that an accident has taken place. Fig. 1 depicts how alert is sent to inform the rescue team of an accident that has taken place when there was a collision of 3 vehicles at a particular location.

FIG. 1: DESCRIPTION OF ACCIDENT SENSOR MODEL



#### IV. PROPOSED MODEL: VEHICLE ACCIDENT EMERGENCY ALERT (VAEA) MODEL

It is observed that many seriously injured individuals from car accidents could have survived such incidents if they had been transported for an emergency medical attention in good time. The use of Information Communication and Technology tools in enhancing transportation systems in Nigeria using VAEA system is to ensure victims of road accidents have faster access to medical attention. The concept of a vehicle accident emergency alert involves equipping the vehicle with MEMS gyroscope sensor incorporated with GPS tracker, alert system, database system and communication systems.

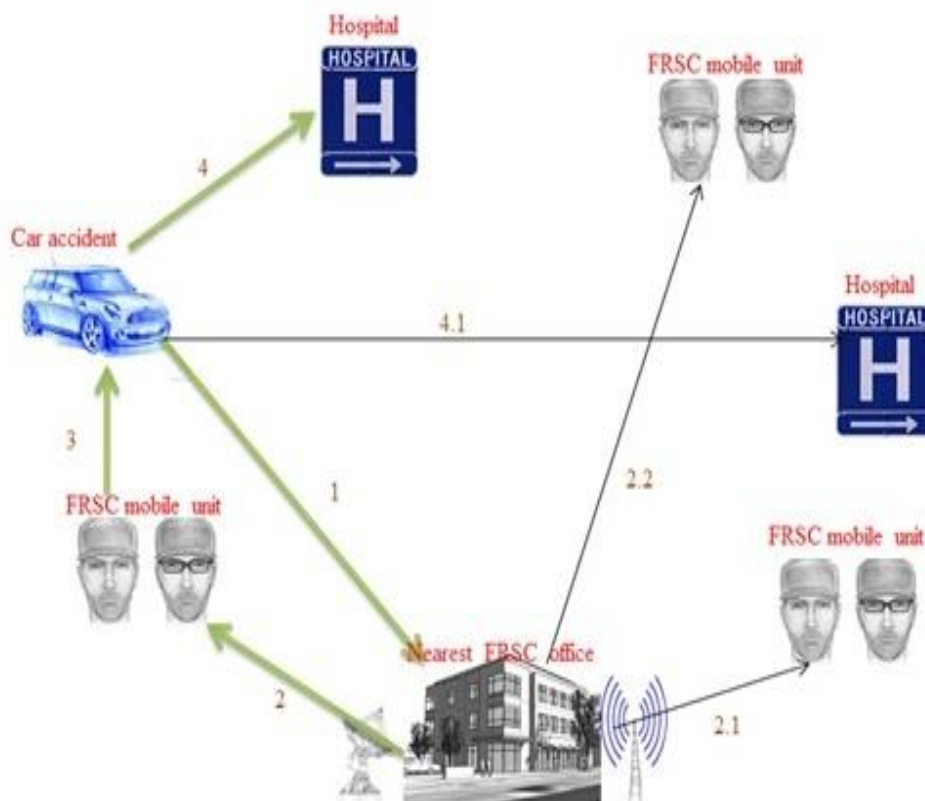
The sensor would be located beside the airbag. Once the air bags are deployed, the sensor gets dislodged from its initial position; the vibration forces a digital signal to be sent to the nearest FRSC office that an accident has occurred. With the signal transmission, the FRSC office would obtain the location of the accident with the use of GPS tracker and the vehicle details on their database management system. After getting the full details of the vehicle, the FRSC office will communicate to the nearest FRSC mobile unit to the accident scene for rescue operation and immediate transmission to the nearest hospital for medical care.

The FRSC has the database of vehicles and tracking technology to get the location. The signal is transmitted to them because of the antenna at the FRSC post which makes it possible to receive the necessary signal from the sensor. This information stored in the database is provided to the FRSC by the agencies involved in vehicle registration and plate number issuance. It is therefore hoped that this solution would improve the live saving possibility of road accident victims that have hitherto died cheap and unnecessary death. Figure 2 shows a graphical flow of the implementation of the proposed model

##### i. Steps in Vehicle Accident Emergency Alert

- As soon as the airbag is deployed, the sensor is capable of detecting this and would communicate with the nearest FRSC office.
- Once the FRSC office receives the alert signal via the antenna. They will locate the accident scene with the GPS tracker and get the vehicle details from their database. With this, the FRSC office will contact the nearest FRSC mobile unit and will communicate with them about the accident and give them the necessary details.
- The work of the FRSC mobile unit is to locate the accident scene which would be communicated from the nearest FRSC office.
- The next activity entails the immediate transmission of the accident victims to the nearest hospital for medical care.

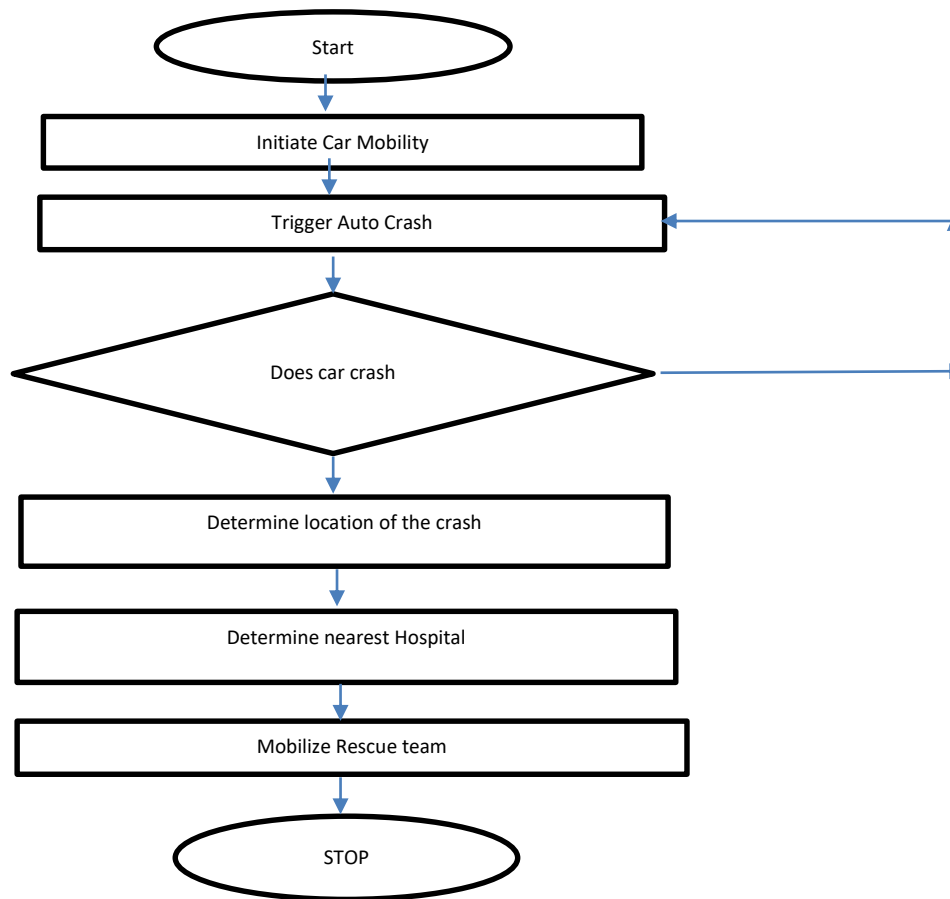
FIG. 2: LAYOUT OF VEHICLE ACCIDENT EMERGENCY ALERT MODEL



ii. **Description of some of the devices/ facilities used in VAEA model:**

Figure 3 captures all the devices and facilities being described in this section.

FIGURE 3: FLOW DIAGRAM OF VAEA MODEL



- MEMS Gyroscope Sensors:** A sensor is a device that detects and responds to some type of input from the physical environment. The specific input is the displacement of the sensors by the airbag. The output is generally a signal that is converted to human-readable display at the sensor location or transmitted electronically over a network for reading or further processing to the FRSC office.
- Antenna:** This will enable the nearest FRSC office to receive digital alert signal sent by the sensor system via wireless communication and transmission.
- Database:** This holds information stored in a computer system for easy storage and retrieval. This is needed by the FRSC office to store the full details of information about the vehicle.
- GPS tracker:** This is a technology that is used to monitor the location of vehicle and it is useful to the FRSC office to access the location of the vehicle that has accident after they would have received alert signal from. It is also installed in the vehicle for easier location and installed in the mobile FRSC unit.
- Federal Road Safety Commission (FRSC) office:**  
The FRSC would be incorporated with IT technology such as antenna, database management system and GPS tracker.
- Mobile Federal Road Safety Commission (FRSC) officers:** These are the officers that have their post on roads either rural or urban roads and will be notified of accident nearest to them via wireless communication for immediate transmission to the nearest medical hospital for medical care
- Medical centre:** The nearest FRSC officers will transport the accident victims to the nearest emergency medical centre for medical care.

FIGURE 4: FLOWCHART OF VAEA MODEL



## V. OUTPUT OF THE SIMULATION SCENARIO OF ACCIDENT OCCURRENCE WITH VAEA

Vehicles are at liberty of movement from one place to another. In the course of these movements however, accidents do occur. In the simulation depicted with Flowchart in Figure 4 and shown in the scenario presented in Figure 5. There were movements of vehicles in road1, road2 and road3 free of collision or accidents. The movement of vehicles at high speed or low level of concentration while driving may lead to occurrence of accident which may be fatal accident in some cases. This accident can be triggered in the simulation presented by pressing the "trigger button".

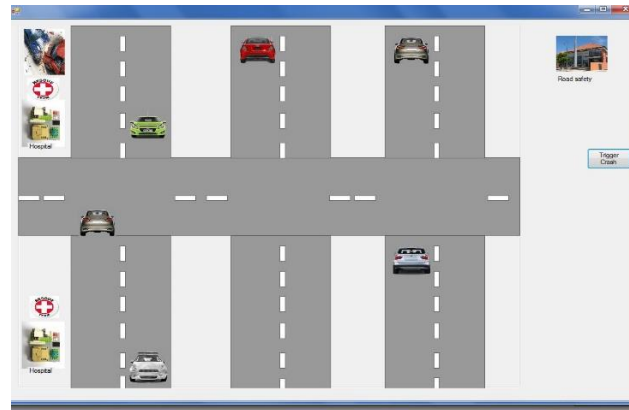
When an accident occurs, it is assumed that the accident victim will be in an unconscious state, and as such would need external intervention. In many cases, it is due to delay of the rescue team to locate the accident scene that leads to untimely death of most accident victims.

In the simulation scenario, an alert is sent to the nearest FRSC office where they communicate with the nearest Rescue Team. In Figure 6, the nearest Rescue Team is seen moving towards the direction of the accident scene upon receiving the distress alert. The rescue team that is alerted to visit the scene depends on the closest team to the accident scene. In the simulation presented in Figure 6, there are two rescue teams, but the team commissioned for the assignment was that which had a smaller proximity. In the simulation scenario shown in Figure 6, the rescue team locates the accident scene to rescue the accident victims.

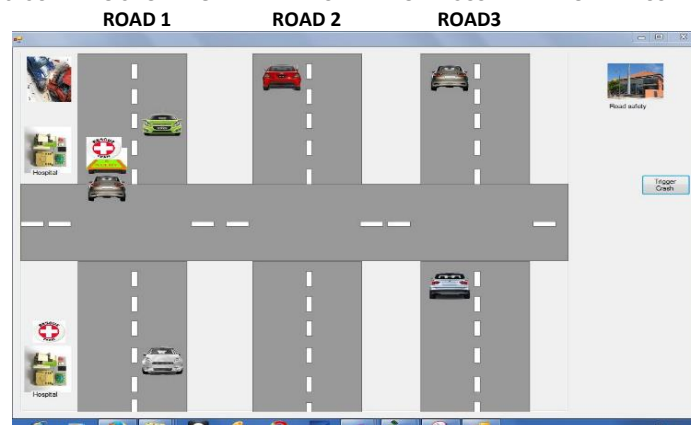
To reduce the death rate of accident victims, there is a need for immediate medical attention. There are many cases where an accident victim gave up as a result of no or delayed medical attention.

In the simulation scenario shown in Figure 7, the rescue team transports the accident victims to the nearest hospital. The rescue team has an option of several hospitals, but the algorithm is designed such that the rescue team locates the nearest hospital.

**FIGURE 5: SCENARIO SHOWING VEHICULAR MOVEMENTS ON THE ROADS**



**FIGURE 6: SCENARIO SHOWING THE ADVANCEMENT OF RESCUE TEAM TO THE ACCIDENT SCENE**



**FIGURE 7: SCENARIO SHOWING RESCUE TEAM RACING TOWARDS THE NEAREST HOSPITAL**

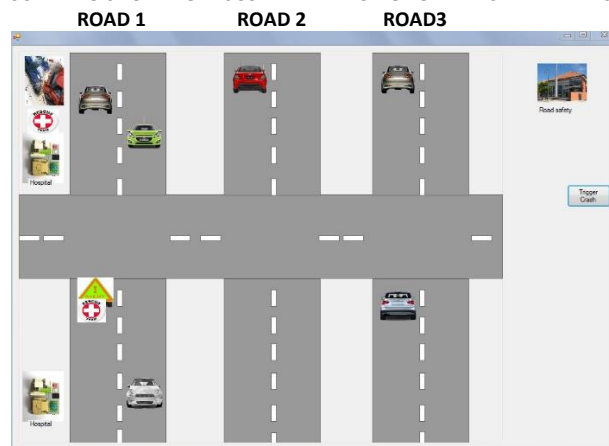


FIG. 8: SCENARIO SHOWING RESCUE TEAM CLOSER TO THE NEAREST HOSPITAL

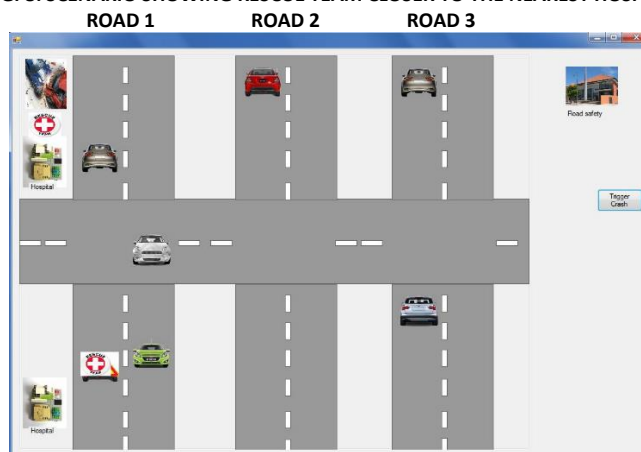


FIG. 9: SCENARIO SHOWING ARRIVAL AT HOSPITAL AND COMPLETION OF TASK BY THE RESCUE TEAM

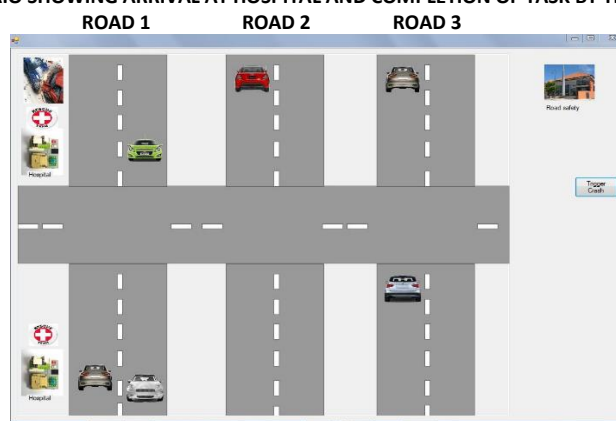


Figure 8 further shows the nearness of the rescue team to the hospital. In Figure 9, the rescue team has finally arrived at the hospital and they are set for the next set of alert from the FRSC station

## V. CONCLUSION

It is therefore hoped that this solution would improve the live saving possibility of road accident victims that have hitherto died cheap and unnecessary death. To reduce the rate of death of accident victims caused by unavailability of emergency medical attention, vehicle Emergency Alert System needs to be applied to transportation system in Nigeria.

## VI. RECOMMENDATION

The researcher therefore recommends that this proposed system should be adopted by Nigeria Transport System to enhance transportation system in Nigeria. The researcher also recommends that people should register their vehicles with FRSC.

## REFERENCES

1. Black, W.R. and Geenhuizen, M. van (2006) "ICT Innovation and Sustainability of the Transport Sector", European Journal of Transport and Infrastructure Research, 1, pp. 1-21.
2. Ericsson, E., Larsson, H., and Brundell-Freij, K. (2006) "Optimizing route choice for lowest fuel consumption – Potential effects of a new driver support tool", Transportation Research, Part C, 14, pp. 269-383.
3. Jonathan L. Gifford, (2010) "ICT and road transportation safety in the United States: a case of "American exceptionalism", Volume 34, Issue 1, IATSS Research, July 2010, Pages 1–8
4. Manzie, C., Watson, H., and Halgamuge, S. (2007) "Fuel Economy Improvements for Urban Driving: Hybrid vs. Intelligent Vehicles", Transportation Research, Part C, pp.1-16.
5. Townsend, A. (2004). Mobile Communication and Sustainable Transportation: An Agenda for Research and Action. STELLA Focus Group 2 Synthesis meeting, 22-23 April 2004, Budapest. [www.stellaproject.org](http://www.stellaproject.org)
6. World Health Organization (2004) Road Traffic Injuries, Fact Sheet, Geneva, World Health Organization.

# DIAGNOSING BANK'S FINANCIAL HEALTH THROUGH Z SCORE MODEL: A CASE STUDY OF ANDHRA PRAGATHI GRAMEENA BANK IN ANDHRA PRADESH (APGB)

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## ABSTRACT

*The key stakeholders of any business be it a banking/nonbanking were much concentrated mostly on its financial health. A continuous process of its financial data is inevitable to diagnose the business in terms of healthy or ill healthy. The absolute figures in the financial statements are not serving this purpose. Despite, the ratio analysis considered as a powerful tool for analysis, but combination of different ratios into single score (i.e Z score) will become the most powerful tool than a single financial ratio. Edward I Altman, Professor of Finance at New York University was the first person who developed a new model popularly known as "Z-score Model" to predict the financial health of the business concerns. He considered four ratios and assigned a weight for each ratio and produced a single number which indicates the financial health of the banking company. In this research paper an attempt is made to predict the financial health of select bank i.e. APGB during 2009-10 to 2014-15 using modified Altman's model. The research findings of the study are that the overall financial health of both APGB was good.*

## KEYWORDS

diagnosis, Z score model, bankruptcy zone, healthy zone, good healthy zone, retained earnings, working capital.

## INTRODUCTION

Tracking the financial health of business is a continuous process. The success of any business is largely depends on its financial health which has been reflecting from the procurement of funds and ends with effective utilization of funds. Therefore, continuous financial analysis of financial position is in-quo-non to keep the business away from financial distress. Financial statements are the sources for financial information, based on which the financial planning and control is done. The profit and loss account provides data about the operating activities whereas balance sheet provides the value of acquired assets and liabilities of the business at a particular point of time. The absolute figures which reported in the financial statements, do not serve the purpose of predicting the financial health of the business. Hence, the financial analyst has to analyze the financial data on a continuous basis in order to ascertain whether the business is in safe zone or not.

Despite the financial analyst had many analytical tools, ratio analysis is most powerful toll to ascertain the financial health of the companies. Alone a single ratio does not serve the purpose. Therefore, it is necessary to combine the different ratios into a single score, which measures the probability of sickness/bankruptcy. Multiple Discriminant Analysis (MDA) is useful tool in such situations. "The use of MDA helps to consolidate the effect of all ratios". The present study is concerned with the analysis of financial health of APGB.

## REVIEW OF LITERATURE

Discriminant analysis may be applied for prediction of sickness, market research, credit rating portfolio selection identification of growth and classification of officers/managers or personals. Discriminant analysis has been widely used to identify and to predict financial health of industrial units. "Multiple discriminant analysis (MDA) is a straight forward statistical technique for calculating how much weight to put on each variable in order to separate the sheeps from the goats". William H. Beaver (1967) selected five ratios out of thirty financial ratios to study the financial health of 79 successful units and 79 unsuccessful units. The ratios were (i) cash flow to total debt (ii) net income to total assets (iii) total debt to total assets (iv) networking capital to total assets and (v) current assets to current liabilities" as expected, failed firms had more debt and lower return on assets. They had less cash but more receivables as well as low current ratios. They also had fewer inventories". It was observed that cash flow to total debt had maximum prediction power among different ratios in the study. Prof. Adward I. Altman (1968) selected five ratios of twenty two initially considered. He took 33 successful firms and 33 bankrupt firms and developed a model popularly known as 'Altman's Z-Score mode'.

Ben Mc Clure (2004)<sup>1</sup> suggested investors to check Z score of their companies regularly. In the Indian context, L.C.Gupta (1979)<sup>2</sup> attempted a refinement of Beaver's method with the objective of building a forewarning system of corporate sickness. A simple non-parametric test for measuring the relative differentiating power of the various financial ratios were used. The test is based on taking a sample of sick and non-sick companies, arraying them by the magnitude of each ratio to be tested, selecting a cut of point which will divide the array into two classes with a minimum possible number of misclassification and then computing the percentage classification error. The cut-off point is determined by visual inspection. The percentage classification error is determined as number of classifications divided by the number in sample. The ratio which results into the lower percentage classification error is the most efficient ratio." Mansur A. Mulla (2002)<sup>3</sup> conducted a study to evaluate financial health of textile mills by using Z score model. Selvam,M and others (2004)<sup>4</sup> made a study to predict the financial health and viability of India cements Ltd. They concluded that the cement company under the study was just on the range of financial collapse. Further, they write that financial health of cement companies has been subject to empirical investigation. Krishna Chaitanya (2005)<sup>5</sup> measured the financial distress of IDBI with the help of Altman's Z score model and predicted that IDBI is not in the health zone and is likely to be insolvent in the near future. Dr. K Venkat Janardhan Rao and M.Durga Prasad (2009)<sup>6</sup> examined the financial performance of Eicher Motors Ltd. According to K.R. Sharma<sup>7</sup>, different models like R.A.Yadav and S.S.Srivastava model, Prof.C.D.Bhattacharya model and Prof. K.B.Mehta's model have been used to measure financial health. The present study is based on Prof. K.B Mehta's model because the model considers Indian conditions.

Dr.V.V.Reddy presented Papers at World Bank International Monetary Fund and Brookings Institution Conference on Financial Sector Governance, The roles of Public and Private Sectors, Public Sector Banks and the Governance Challenge: Indian Experience, Monetary and Financial Sector Reforms in India: A Practitioner's Perspective (Indian Economy Conference, Cornell University, USA (2003), 'Towards Globalization in the Financial Sector in India' –Inaugural address at the Twenty Fifth Bank Economists Conference, Mumbai. In these addresses Dr. Reddy discussed the various initiatives being taken by the Reserve Bank of India to ensure financial health of the Banks. The regulatory changes initiated by the Reserve Bank of India, the shift from micro-prudential regulation to macro regulation have been discussed. The changes initiated have brought about a sea change in the ownership of the Banks, a marked improvement in the soundness parameters like the return on assets, staff productivity, technology, asset quality etc.

## OBJECTIVES OF THE PAPER

1. To evaluate the financial health of Andhra Pragathi Grameena Bank (APGB)
2. To give suggestion for the improvement of the state of its affairs



**METHODOLOGY**

Secondary data, in the form of annual reports and schedules of financial statements like Cash flow and funds flow, was collected for 6 years from 2009-10 to 2014-15. Financial ratios are computed in tune with the objectives of the paper. The financial variables considered in the study are; net-working capital, total assets, retained earnings, book value of equity, book value of debt and net sales. The research tools applied in the study are; averages, percentages and Z score model. Criteria applied to judge the financial health are; bankruptcy zone, healthy zone and good healthy zone. The detailed model of Z score is Prof.K.B. Mehata's: A Modification of Altman's Model.

Prof.K.B. Mehata's model represented a modification of Altman's model as per Indian conditions." For example, as all shares were not listed on stock exchange, instead of market value of equity, book value of equity was taken as fourth financial variable (X4) considered were:

X1= Net working capital to total assets.

X2 = Retained earnings to total assets

X3 = Book value of equity of book value to total debts.

X4 = Net sales to total assets

Discriminant Function:  $Z = 0.717X1 + 0.845X2 + 0.42X4 + 0.995X5$

Where;

X1 Shows liquidity position to the total capitalization

X2 Indicates cumulative profitability overtime and leverage

X3 Presents the long-term solvency position. It shows how much assets of an enterprise can decline in value before the liabilities exceeds the assets and the concern becomes insolvent.

X4 Reveals the sales generating capacity of the assets.

Measurement of financial health: There may be three situations;

1. If Z score is below 1.2 then the unit is considered to be in bankruptcy Zone. Its failure is certain

2. If Z score lies between 1.2 and 2.9 then the unit is considered to be in grey area or healthy zone. In this situation the failure is uncertain to predict.

3. If Z score is above 2.9, then the unit is considered to be in good health Zone.

**ANALYSIS AND RESULTS**

**Working capital to total assets:** Working capital is the excess of total current assets. The ratio of working capital to total assets shows liquidity position of relative to total capitalization. "Consistent operating losses will cause current assets to shrink relative to total assets. A negative ratio, resulting from negative working capital, is a serious problem". The ratios of working capital to total assets of both the companies are furnished in the Table 2 about here.

It may be observed from the table 2 that the working capital to total assets ratio of APGB has been around 0.158 to 0.473. It indicates that the APGB has a moderate level of investment in current assets and which shows that the bank has maintained optimum funds in the form of current assets. This analysis will help the bank as a guiding principle not to cross the threshold of working capital limits.

**Retained earnings to total assets:** The ratio of retained earnings to total assets indicates that how much portion of total assets has been financed by retained earnings. Higher the ratio greater the financial stability of the company at times of low profitability periods. And also it depicts that the company utilizing its own earnings as cheaper source of finance rather than debt finance. The percentages of retained earnings of APGB are furnished in the table 2 about here.

From the table 2 it is observed that on an average 0.37 % of APGB are financed by its retained earnings during the study period. This study shows that the bank has been utilizing more debt rather than its retained earnings. The increasing trend of retained earnings during the study period indicates that the bank has unsustainable growth.

**Book value of equity to book value of total debts:** This ratio is used to ascertain the soundness of the long-term financial policies. The company having 1:1 equity-debt mix is considered as quite good. Excessive debt tends to cause insolvency. Fixed interest paid on debt whereas variable dividend is paid on equity. If debt is more than the equity it will reduce the profit of the company, despite increases the profitability of the shareholders. It will be a curse in times of bad performing. The relevant information of the APGB is furnished in the table 2 about here.

From the table 2 it is observed that the on an average equity portion of APGB was 14.5% in comparison to debt portion in the capital structure during the study period. The highest equity portion of total capital of APGB is 15.1% in 2009-10 and the lowest portion of equity is 13.6% in 2012-13. On the basis of the analysis pertaining to this ratio, it may be concluded that the financial health of the APGB is not good. It provides a less margin of safety to its creditors in times of bankruptcy. Therefore, it is advised the APGB has to take an appropriate step to improve the equity portion as per its benchmark.

**Sales to total assets:** Sales revenue plays a pivotal role in overall performance of the companies because all the operations are more or less depend on the sales revenue. Sales to total assets ratio measure the power of the asset in generating the sales. Higher ratio indicates the better performance and while poor ratio indicates the poor financial management of the companies in the optimum utilization of its assets in generating the sales revenue. The ratio varies from one company to another. The relevant information of the two selected sample pharmacy companies is furnished in the table 2 about here.

From the table 2 it is observed that the average ratios of sales to total assets of APGB are 1.2433 during the study period. The ratio of APGB ranges from 1.20 to 1.27 times during the study period. Based on the information from table 2, it was crystal clear that the APGB still had an opportunity to improve its business capacity but still bank has to optimize its assets in generating more business for the better improvement in the banks revenue. It is suggested that APGB has to take appropriate steps in the optimum utilization of its assets in generating more and more deposits coupled with advances.

From the table 3, it has been found that the Z score was fluctuated above the bankruptcy zone during the study period. The score indicating the positive signals about the bank's financial health.

**TABLE 1: Z SCORE COMPONENTS OF APGB**

Year	Net working capital	Total assets	Retained earnings	Net sales	Book value of equity	Book value of debt
2009-10	195941.14	558031.39	167409.41	702261.6	70962.35	469817.63
2010-11	108255.22	683028.18	218569.01	830680.71	83975.24	582282.78
2011-12	136608.45	792731.97	301238.15	993974.26	99018.88	679156.84
2012-13	173254.98	971771.39	340119.98	1170346.61	114579.82	839671.58
2013-14	332621.06	1048130.28	408770.80	1319028.61	130616.82	896590.38
2014-15	558625.11	1179681.25	530856.56	1500916.64	147161.64	1012351.20

Source: Computations from APGB Financial statements

**TABLE 2: STATEMENT SHOWING THE RATIOS USED IN Z SCORE ANALYSIS OF APGB**

	Financial ratios	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Mean
X1	NWC to total assets	0.350	0.158	0.172	0.178	0.317	0.473	0.2746
X2	Retained earnings to total assets	0.30	0.32	0.38	0.35	0.39	0.45	0.365
X3	BVE to BVD	0.151	0.144	0.145	0.136	0.146	0.145	0.145
X4	Net sales to total assets	1.26	1.22	1.25	1.20	1.26	1.27	1.2433

Source: Computations from APGB Financial statements

**TABLE 3: STATEMENT SHOWING THE Z SCORES OF APGB**

Year	0.717X1	0.842X2	0.42X3	0.995X4	Z Score
2009-10	0.25095	0.2526	0.06342	1.2537	1.8206
2010-11	0.11329	0.2694	0.06048	1.2139	1.6571
2011-12	0.12332	0.3199	0.0609	1.24375	1.7479
2012-13	0.12763	0.2947	0.05712	1.194	1.6735
2013-14	0.22729	0.3284	0.06132	1.2537	1.8707
2014-15	0.33914	0.3789	0.0609	1.26365	2.0426

Source: Computations from APGB Financial statements

**CONCLUSION**

The Z score of APGB based on the modified Altman's model is between 1.65 and 2.04 during the study period (i.e 2009-10 to 2014-15). It is observed from the table 3 that APGB is in grey area or healthy zone. In this situation the failure of APGB is uncertain to predict. Finally, it can be concluded that the overall financial health of APGB is good.

**REFERENCES**

1. Ben Mc Clure, (2004), "Z marks the Eng" Feb.11.www.investopedia.com
2. Dr.K.V.J.Rao and M.Durga Prasad (2009),Z score analysis-A tool to predict Financial Health, The Management Accountant,Aug.,pp.608-610.
3. Gupta L.C., Financial Ratios as Forewarning indicators of Corporate sickness" Bombay ICICI 1979 quoted by Pandey I.M.op.cit, p.184.
4. K.R.Sharma (2008), Business Research Methods,National Publishing House,Jaipur and Delhi, p.260-262.
5. Krishna Chaitanya V. (2005), Measuring Financial Distress of IDBI using Altman Z score model", The ICFAI journal of Bank Management, August, Vol.IV, No.3, pp.7-17.
6. Mansur, A Mulla (2002), "Use of Z score Analysis for Evaluation of Financial Health of Textil Mills- A Case Study" Abhigyan, Jan-March Vol.XIX,No.4.pp.37-41.
7. Pandey, I.M (2000), op.cit. p.184.
8. Pandey,I.M. (2000), " Financial Management" Vikas Publishing House Pvt.Ltd., New Delhi), Eight Edition, p.185.
9. Selvam M. Vanitha S. and Babu M. (2004), A study on financial health of cement industry – "Z" score analysis", The Management Accountant, July, Vol.39, No.7, pp.591-593.

## GANDHI AND WOMEN EMPOWERMENT

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## ABSTRACT

*The legacy of Mahatma Gandhi is immeasurable undoubtedly. His life, his work, his views and his ideas have left a unique impact on every aspect of life of India as well as of the whole world. He has addressed uncountable number of issues, whether they relate to personal or social or political subjects. The whole collection of his works number nearly hundred and above. Gandhi ji worked not only for the political emancipation of the nation, but for the liberty of the suppressed and oppressed sections of the society. One of the indispensable results of his works has been the awakening of women, which made them shed their deep-rooted sense of inferiority and rise to dignity and self-esteem. Gandhi ji respected traditions of the society, but not at the cost of loss of individual dignity. He always tried to mobilize public opinion against such evils. According to him, "It is good to swim in the water of tradition, but to sink in it is suicide." He worked very practically and dynamically for the freedom of women from such shackles and evils throughout his life. He realized that there were deep-rooted customs hampering the development of women which straightaway affect the development of nation too. The present study facilitates an attempt to understand Gandhi's views and philosophies on women in the context of social, economic and political aspects. What is basically required is to take an affirmative action to eliminate this discrimination and encouraging the society for more openness and transparency for the second half population of our nation. It also suggests that by empowering women, we can cure a whole gamut of problems faced by us and reveals the significant insights coming in this scenario by way of analyzing the challenges before this suppressed sector of our country. Besides, the study is going to be a pioneering effort by way of making suggestions towards multifarious and multidimensional picture of an independent and self-reliant future of Indian women.*

## KEYWORDS

Indian society, women empowerment.

## INTRODUCTION

To call woman the weaker sex is a libel; it is a man's injustice to woman. If by strength it is meant moral power, then woman is immeasurably man's superior. Has she not more self-sacrificing, has she not great powers of endurance, has she not greater courage? Without her man could not be. If non-violence is the law of our being, the future is with women."

**Mohan Das Karam Chand Gandhi**

The legacy of Mahatma Gandhi is immeasurable undoubtedly. His life, his work, his views and his ideas have left a unique impact on every aspect of life of India as well as of the whole world. M.K. Gandhi was a man considered as a very good minded universal person. He was held as another Buddha and even another Jesus. Indians called him the 'Father of the Nation'. People showered their love, respect and devotion on him in an unparalleled measure. They applied on their foreheads the dust on the path he had trodden. For them, he was almost an incarnation of God, who had come to break the chains of their slavery. The whole world bowed to him in reverence. Even his opponents held him in great respect. He was the politician, the philosopher, the socialist and the educationist. He lived with the accumulation of karmayoga and gyan yoga. No opposition, scorn or ridicule could affect him. Truth was his sole guiding star.

His eleven vows, his technique of Satyagraha, his constructive programme - all were meant to awaken and strengthen the soul-force. He awakened and aroused a nation from semi-consciousness. It was a Herculean task. For, India was a society where almost half of the population i.e., women, was behind purdah or confined to the four walls of houses, where one-fourth of the population - the depressed classes - was living marginalized life, where many did not have a single full meal every day. Gandhi made the oppressed sections wake up and break their chains. He addressed uncountable number of issues, whether they relate to personal or social or political subjects. The whole collection of his works count nearly hundred and above. Gandhi ji worked not only for the political emancipation of the nation, but for the liberty of the suppressed and oppressed sections of the society.

One of the indispensable results of his works has been the awakening of women, which made them shed their deep-rooted sense of inferiority and rise to dignity and self-esteem. Gandhi ji respected traditions of the society, but not at the cost of loss of individual dignity. He always tried to mobilize public opinion against such evils. According to him, "It is good to swim in the water of tradition, but to sink in it, is suicide." He worked very practically and dynamically for the freedom of women from such shackles and evils throughout his life. He realized that there were deep-rooted customs hampering the development of women which straightaway affect the development of nation too. "When Woman, whom we all call ablaa, becomes Sablaa, all those who are helpless will become powerful." These words truly show that how much he was willing to develop such a capacity in women to make them strong enough.

## BREAKING THE SHACKLES: GANDHI'S VIEWS ON WOMEN

The Mahatma said that women have been suppressed under custom and law for which man was responsible and in the shaping of which she had no hand. Rules of social conduct must be framed by mutual co-operation and consultation. Women have been taught to regard themselves as slaves of men. Women must realize their full status and play their part as equals of men. In a letter written to Rajkumari Amrit Kaur from Wardha on 21, October, 1936 Gandhi writes, "If you women would only realize your dignity and privilege, and make full use of it for mankind, you will make it much better than it is. But man has delighted in enslaving you and you have proved willing slaves till the slaves and the slave-holders have become one in the crime of degrading humanity. My special function from childhood, you might say, has been to make women realize her dignity. I was once a slave-holder myself but I proved an unwilling slave and thus opened my eyes to my mission. Her task was finished. Now I am in search of a woman who would realize her mission. Are you that woman, will you be one?"

What is significant here is his image of woman and his hope for her, so radically different from that of any earlier reformer. He was not the first to address women's issues in India; the great cultural renaissance, as also the ferment of political agitations for freedom had already reached a high peak in the late nineteenth century. Before the advent of Gandhi on the scene, the attitude to women, though sympathetic, was patronizing; leaders and social reform groups thought in language that made women look helpless. They wanted to protect, uplift, and bring relief to women. No doubt there was value in all of it. Yet, with Gandhi, a new and unique element emerged. Woman to him was neither man's plaything, nor his competitor, struggling to be like him.

## ➤ GANDHIJI'S IDEA OF WOMAN AS MOTHER AND "MOTHER INDIA"

Gandhiji's devotion to women as mother began with his devotion to his mother Putlibai and his wife Kasturba. Motherhood became increasingly his model for liberation of India and his own life. A mother, having brought forth a child, selflessly devotes herself to his care till he grows up and becomes independent. Unless we have feeling and devotion for our motherland many countries will be lying in wait to crush us down. He saw no hope for India's emancipation while her womanhood remained un-emancipated. He held men to be largely responsible for the tragedy. In the course of his social reform work, the realization came to him that if he wanted to reform and purify society of the various evils that had crept into it; he had to cultivate a mother's heart. Therefore, He learnt the fundamental aspects of his soul politics from his mother and his wife.

## ➤ GANDHI JI'S IDEAL MODELS

Gandhi often talked about Sita, Draupadi, Damayanti and Mirabai as great women. He visualized the Indian women as new Sitas, Draupadis and Damayantis, "pure, firm and self-controlled". For Gandhi, Sita was not a weak and dependent creature, but a strong woman who kept her heart and body pure. Another ideal model

was Draupadi who was not dependent on men and saved herself by an appeal to Krishna. Here the appeal to Krishna is to be understood as following one's own conscience. He saw Mirabai, as a symbol of courage, who followed her chosen path by defying the social norms of the time. It is interesting to note that Gandhi does not advise a woman to be an ideal wife or ideal mother. Deviating from the traditional framework, he advises women to be sisters. Pointing out the greatness of a sister over a wife, he maintained that a sister is to the entire world, while a wife hands herself over to one man.

#### ➤ INFLUENCE OF WOMEN PUBLIC FIGURES ON GANDHI JI

Gandhi revolutionized not only Indian politics, but also the whole perception of life for women. In his words, **"My contribution to the great problem of women's role in society lies in my presenting for acceptance of truth and *ahimsa* in every walk of life, whether for individuals or nations. I have hugged the hope that in this, woman will be the unquestioned leader and, having thus found her place in human evolution, will shed her inferiority complex. Women's entry into national politics through non-violent methods brought miraculous results. On the one hand, women became aware of their inner strength, and on the other, the process brought human and moral elements into politics."** Gandhi had tremendous faith in women's inherent capacity for non-violence. And his experience of participation by women in politics from his days in South Africa till the end of his life bears testimony to the fact that they never failed his expectations. Gandhi could see woman as connected with service and not with power.

#### ➤ ECONOMIC SELF-RELIANCE

Though Gandhi visualized a humane society, free from exploitation and in justice, built by responsible men and women still, he maintained that the spheres of work for woman and man were different. **"She is passive, he is active. She is essentially mistress of the house. He is the breadwinner. She is the keeper and distributor of the bread. She is the caretaker in every sense of the term."** Gandhi was of the firm opinion that if women have to work outside the home, they should do so without disturbing it. They can take up some work, which would supplement the income of the family, and spinning, according to him, was perhaps the best work they could undertake. Spinning and weaving for women were the first lesson in the school of industry. The spinning wheel can be the woman's loving companion of livelihood for the poor family and a means to supplement the income of the family of middle class as well.

#### ➤ GANDHIJI AGAINST GENDER-BASED DISCRIMINATION

Gandhi was totally opposed to gender discrimination. Gandhi did not like Indian society's preference for a boy and a general neglect of a girl child. In fact, in most cases she is not allowed to be born. If born, her survival is not ensured. If somehow she survives she is subjected to neglect. She does not get respect and the status she deserves equal to that of a boy. He described discrimination against women as an anachronism as already stated: he said: **"I fail to see any reason for jubilation over the birth of a son and for mourning over the birth of a daughter. Both are God's gifts. They have an equal right to live and are equally necessary to keep the world going."** Gandhiji called women as the noble sex. He said that if she is weak in striking, she is strong in suffering.

#### ➤ GANDHI JI ON WOMEN'S CONTRIBUTION

Fundamentally, man and woman are one; their problems must be in one essence. The soul in both is the same. The one cannot live without the other's active help. Nevertheless, there is no doubt that at some point there is bifurcation. While both are fundamentally one, it is also equally true that in form there is a vital difference between the two. Hence the vocations of the two must also be different. The duty of motherhood, which the vast majority of women will always undertake, requires qualities which man need not possess. Woman, the mother of man, shows his capacity in the largest measure? She shows it as she carries the infant and feeds it during nine months and derives joys in the suffering involved. What can beat the suffering caused by the pangs of labour. But she forgets them in the joy of creation. Let her transfer that love to the whole of humanity.

#### ➤ GANDHI JI AND EMPOWERMENT OF WOMEN

Gandhi was a passionate lover of humanity. He was a friend of the lowly and the downtrodden. Harijans, women and the poor commanded his most tender attention. He had almost an instinctive understanding of women and their problems and had a deep abiding sympathy for them. He preferred girls to remain unmarried all their lives than to be humiliated and dishonored by marrying men who demanded dowry. He found dowry marriages "heartless". Gandhi wished for mutual consent, mutual love, and mutual respect between husband and wife. He said: **"I am uncompromising in the matter of woman's rights. In my opinion she should labour under no legal disability not suffered by man. I should treat daughters and sons on an equal footing of perfect equality."** Though pre-occupied with heavy responsibilities his views in this regard were clear and he tried to educate the public to accept women as equal partners.

## RELEVANCE OF GANDHIAN LEGACY

### THE CONTEMPORARY WOMEN'S MOVEMENT

Contemporary feminist's analysis on empowerment of women includes not only of sexism but also of racism, classism and imperialism as determining factors in shaping women's status in the private and public realm. This development seems consonant with Satyagraha which for Gandhi was an inclusive quest to find creative solutions for all forms of oppression. In India and elsewhere, there are healthy movements of Gandhi's followers. Feminists and other women are engaged in many forms of action that Gandhi may not have anticipated. We have much to learn from Gandhi's theory and practice, but not to the exclusion of modern ideas and movements. He was never against any idea/s coming from any quarter/s. He said: **"I do not want my house to be walled on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any. I refuse to live in other people's houses as an interloper, a beggar or a slave."**

Gandhi's attitudes towards women were shaped by his innate sense of comparison and justice. Comparing his vision of women with the current status of women and the ongoing struggle for women's empowerment will provide a measure of what has been achieved. Gandhi was able to devote himself to such a mission and formulated views on all aspects of a woman's life, political, social, domestic and even the very personal or intimate. Sometimes highly progressive, other times conservative, he created an empathy with his audience through this cultural fine tuning. Today's liberated woman would find his position almost totally unacceptable. They would argue that while women's special calling may be child nurturing, peace loving and preservationist they are capable of performing all tasks hitherto left to men.

But Gandhi revealed a deep understanding of the pulse of society, and reflected its rhythm. He offered spinning and the salt agitation as nonviolent ways for women to join the political movement for swaraj. He saw it as right as well as possible for women at that time in history. By 1940, he had provided modifications to his earlier more generalized approach to women's contribution to public life. In an issue of the Harijan of that year, there are questions about the rising participation of women in activities outside the home:

**Question:** The awakening of civil and political consciousness among Indian women has created a conflict between their traditional domestic duties and their duty towards society. If a woman engages in public work, she may have to neglect her children or her household. How is this dilemma to be solved?

**Answer:** More often than not a woman's time is taken up, not by the performance of essential domestic duties, but in catering for the egoistic pleasure of her lord and master and for her own vanities. To me this domestic slavery of the kitchen is a remnant of barbarism mainly. It is high time that our women kind was freed from this incubus. Domestic work ought not to take the whole of a woman's time.

Despite a change in attitude he seems to have the middle class woman rather than the poor one in mind, and adheres to the position that a woman should be able to order her household duties in such a manner as to complete them and yet have enough time for public work were she to abjure vanities. The onus is still on the woman. However, Gandhi was always willing to modify his own stated positions. He simply resolved his contradictions by responding instinctively and practically to a situation as he saw it.

In the present context, we see that, on paper, India is far ahead in policies and legislation favouring women. It adopted universal franchise before many other nations. Yet men in the political structure refuse to acknowledge the relationships between social justice and gender justice while women outside the political system are unable to effectively implement and integrate these two most powerful national and international agendas. The increasing criminalization of politics and the use of vast sums of unaccounted money and ugly muscle power by caste and criminal gangs present an entire hostile environment for women who wish to pursue a political vocation. With both caste and gender groups perpetuating traditional and modern divisions and indigenous human resources being replaced by western technologies the mission of Gandhi and the dreams of women are yet to be fulfilled.

**CONCLUSION**

While concluding, we must agree that Gandhi ji thought us that empowerment of women without sharing our material, financial, intellectual resources with the poor women is not possible. Sharing requires sacrifice. In short, this is the Gandhian formula (sharing and sacrifice). Nobody has done as much as Gandhi has done to bring out masses of illiterate women from the four walls of their houses. A few talented women were spotted by him who worked shoulder to shoulder with him. Many of us have to change our life style. Women have to be conscious and aware to feel and realize at every step of their life that they are builders of their nation and the peaceful world. **"The hand that rocks the cradle can also be the hand that rules the world!!!"** Let the pursuit of power be not only aim of the women empowerment. It should be "total emancipation". No one can double the efforts made by Gandhi to empower women. He had attracted so many millions of not only literate but illiterate women without the power of state, without the modern information technology and offering in return only sweat, toil, and pain, is an exceptional feat! His insistence on Women's education is the first step in right direction. We still have miles to go to achieve our cherished goal to empower women. In Gandhi's philosophy, the women of India found a new identity. His words and deeds have inspired thousands of women, and will continue to do so, in their struggle against injustice and inequality.

**REFERENCES**

1. Dr. Ajay Agrawal, Dr. Amitabh Pande & Poorva Pande Sharma, 'Women Empowerment In India Through Corporate Social Responsibility: Policies & Challenges: A Case Study Of Ntpc Ltd.', International Journal of Research In Commerce & Management, Volume No. 7 (2016), Issue No. 12 (December), ISSN 0976 - 2183, pp. 50-52.
2. Dr. S.C.B. Samuel Anbu Selvan & V. Suganya, 'Women Empowerment In Madurai City', International Journal of Research In Computer Application & Management, Vol. No. 5 (2015), Issue No. 7 (July), ISSN 2231 – 1009, pp. 85-87.
3. Dr. G. Yoganandan & G. Sivasamy, 'Challenges of Women Entrepreneurship In Modern India', International Journal of Research In Commerce, Economics & Management, Volume No. 6 (2016), Issue No. 11 (November), ISSN 2231 – 4245, pp. 31-33.
4. Dr. Y. Krishna Mohan Naidu & M. Kondala Rao, 'Does Women Empower Through Self Help Groups? A Study In Ranga Reddy District, Telangana, India', International Journal of Research In Commerce, IT & Management, Volume No. 6 (2016), Issue No. 7 (July), ISSN 2231-5756, pp. 30-34.

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