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# SEMCOM Management & Technology Review

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Greetings to Readers !!!

It is indeed a matter of pleasure to present before you this issue of SMTR. Continuing the tradition, this issue has research articles on subjects like Finance, Marketing, Human Resource Management, Corporate Social Responsibility, Goods and Services Tax (GST) and Information Technology.

In the area of marketing, a research paper on Measurement of Service Quality: A Journey towards service excellence and customer satisfaction talks about multidisciplinary approach in understanding Service Management, Organizational Behaviour, Operations and Human Resource Management. Outdoor advertisement is one of the important promotional techniques with perspective of marketing which lead customers to purchase a product or to avail service. A Study exploring the impact of Outdoor Advertising on Customer Purchase Decision reveals the effect of outdoor advertisement on purchase decision of people in Surat city. Elaborative Descriptive research design used by the researcher would be of interest for the readers. In the area of Finance, a study on impact of merger and acquisition on financial performance of selected Indian companies presents the impact of Mergers and Acquisitions on financial performance of selected Indian companies. In continuation, readers would also benefit from a study related to PayTM. This study focuses on the perceived changes in buying behavior of consumer after demonetization and also analyzes how people who have never used ATM, PayTM, online shopping etc. have become digitalized.

Most debated system of taxation, GST has completed 15 months of its existence in India. This issue presents variety of research deliberations on GST and its effects. One such study is on Awareness and Perception of Goods and Service Tax in Anand District which provides an understanding to the policy makers on peoples' perception towards GST. It presents a perspective in the areas of increasing awareness pertaining to the benefits of GST, charging and collection mechanism as well as enhancing society's confidence in bringing necessary changes for making it user friendly by the government. A study on comparison of the goods and services tax between India and other countries would give an insight on GST between and among various countries with the recent implementation of the same in India. One more study touches upon altogether different aspects of GST. It is a study on impact of Goods and Service Tax practices in India and how after the implementation of GST in India it would be worthwhile to assess the role of GST in bringing positive impact on the various areas like, Manufacturing Industry, Poverty reduction, Agriculture, Employment, Price Level, Exim policies, GDP, MSME, and Government Revenue etc.

A paper titled Accounts and Audit under GST discusses best tax paying practices to avoid any negligence. In India, the tax compliances by most tax payers leave a lot to be desired. Therefore, certain checks and balances are needed for avoiding tax leakages due to inadequate information of tax laws, negligence in maintaining records, human or technical errors and fraud. Author has tried to present detailed idea on how it can be handled in best possible manner. Tax Regime of E-Commerce Business under Goods and Services Tax Structure is a study on taxation of E-Commerce which has been specifically designed to provide in-depth knowledge of provisions pertaining to E-Commerce Transactions under GST regime and regulatory guidelines for foreign direct investment on e-commerce prevailing at this point of time, in a very practical and simplified manner. Information and Technology has become indispensable component of business operations today. 'Trust is short. Have a security' is a case study of Ashley Madison. It is a case study on the biggest case of data breach in the Year 2015. It is an eye opener about the privacy of sensitive personal information and security of customers' data. Author is a 'Certified Cybercrime Investigator' and 'Certified Network Security Professional' and has made an attempt to give due justice to the Information available from different sources.

One more IT based study is Partial De-compilation and increasing code re-usability of byte code with the help of reflection in Java and it is a pure technical programme based paper. The study on an impact of big data analytics on banking sector analyses how banks reap the benefits from big data as they now can extract good information quickly and easily from their data and convert it into meaningful benefits for themselves and their customers. Banks internationally are beginning to harness the power of data in order to derive utility across various spheres of their functioning.

Human nature is dynamic and so is its impact on human activities. This issue has an exploration of the problems faced by working women which is an effort to know what problems working women have to face in the society; be it at home, at office or at the social gatherings. Discussion on HR issues continues with a study on job satisfaction among employees engaged in selected hospitals of Vadodara city. The study focuses on the level of job satisfaction amongst the employees engaged in hospitals and to understand the impact of selected variables such as compensation system, suitable working condition and superior support on job satisfaction. All business functions in due course contribute towards the larger interest of societal development. It is desirable that we keep showing our concerns to our surrounding and be responsible towards it. The study on corporate social responsibility expenditure of selected companies in India studies the trend of corporate social responsibility expenditure made by firms in India, especially after the implementation of the Companies Act, 2013. It studies the relationship between CSR expenditure and profits of the firm and highlights positive effects of this relationship.

Hope this issue quenches your exploration thirst and paves newer ways to research out more business management concerns that may leads to better performance.

**Best wishes,  
Waheeda Thomas**



## About SEMCOM

Sardar Gunj Mercantile Cooperative Bank Ltd. (Anand) English Medium College of Commerce and Management (S G M English Medium College of Commerce and Management) popularly known as SEMCOM was established in the year 1997 with the aim/vision to impart quality education to students who desire to graduate in commerce, management and IT. The college has successfully completed 18 years. Its alumni has established themselves in various walks of life across the globe. The college has been established by Charutar Vidya Mandal (CVM), an educational trust with a vision to regenerate society through education. SEMCOM was set up with the generous donation of Rs. 35 lakhs against the total project cost of Rs. 150 lakhs by Sardar Gunj Cooperative Bank Ltd. (Anand) on self- finance basis keeping in mind the changing policy of the government in inviting private institutions to supplement the government's efforts in higher education. The college has an ISO Quality System since 2004, which upgraded to 9001:2008 in September 2009. The college is re-accredited grade "A" by NAAC with a CGPA of 3.01 on 4 point scale. The college, within a short span of time has made its presence felt in India and abroad.

*The college is affiliated to Sardar Patel University, Vallabh Vidyanagar.*

### Objectives / Goals

- ◆ To focus on integral development of students.
- ◆ To offer courses and programs in tune with changing trends in the society as a whole.
- ◆ To update the curriculum as per the need of the business and industry.
- ◆ To create unique identity in the educational world at the national as well as international level.
- ◆ To institutionalize quality in imparting education.
- ◆ To incorporate innovations on a continuous basis in the entire process of education at institutional level.
- ◆ To create platform for the students for exhibiting their talent and for development of their potentials.
- ◆ To generate stimulating learning environment for students as well as teachers.
- ◆ To build cutting edge amongst the students to withstand and grow in the competitive environment at the global level



## Measurement of Service Quality: A Journey Towards Service Excellence and Customer Satisfaction [An Epigrammatic Review of Literature on 'Service Quality']

Dr. (CS) Kalpesh Purohit

### Abstract

*The growth and growth of services as the engine and catalyst of modern-day economic prosperity has resulted in a veritable explosion of academic literature dealing with the diverse periphery of service management. Contributors to this literature have drawn their expertise from the areas of Marketing, Organisational Behaviour, Operations and Human Resource Management. The secret for this multidisciplinary approach is rooted with characteristics of services and role of "People", people and people" in the service exchange process. In the present day contacts, growing number of academicians, researchers and industry experts have begun to pool their knowledge across disciplines in order to extend the frontiers of service marketing and service management thought in to the twenty-first century. Understanding Services management inevitably includes conceptualization of 'Service Quality' and its measurement.*

*An attempt is made in the paper to throw light on certain indispensable aspects of service quality and its measurement by carrying out an extensive review of literature of contribution made by researcher in the area as pioneering work.*

### Prologue:

Marketing of services is largely based on relationship and value because the consumers buying are intangible and his or her purchase decisions are based on the reputation of a single person; it's more difficult to compare the quality of similar services and the consumers cannot return the service. Marketing of services is different from marketing of goods because of the unique characteristics of services, viz., intangibility; heterogeneity; perishability, and inseparability. These characteristics also require the marketing mix of services to be extended, to include Process, People and Physical evidence, in addition to the four traditional Ps of the marketing mix strategy. Marketing of services is a people-dependent process, owing to the fact that there is often no tangible product that is delivered to customers. Due to the dependency in case of marketing of services on the service provider, the importance of concepts like relationship marketing cannot be ignored in marketing of services. The Service Sector of Indian Economy contributes to around 55 per cent of India's GDP during the year 2016-2017. It plays a leading role and contributed 68.6 per cent of the overall average growth in GDP in the year 2016-2017. There was 9.4 per cent growth in the Indian economy during commencing phase of 21<sup>st</sup> century. The service sectors of Indian economy that has grown faster than that of the Indian economy includes Information Technology which is most leading service sectors in Indian economy; IT-enabled services (ITeS); Telecommunications; Financial Services; Community Services, and Hotels and Restaurants (<http://business.mapsofindia.com>). 'Service Quality' and its measurement, 'Role of People as Internal Customers', 'Customers Satisfaction' and its measurement have started soliciting vigilant approach on the part of marketers to be successful

in the market place, which requires in-depth understanding of the areas.

### **An Epigrammatic Review of Literature:**

An attempt has been made by the researcher to review the research made by others in the area of conceptualization of service quality and its measurement together with its related aspects:

To illustrate, Jagdish N. Sheth and M. Venkatesan (1968)<sup>1</sup> had explored the risk-reduction process over time in an experimental situation. Their finding was that there exists more active information seeking in early trials which implies that customers may seek information from personal and impersonal sources when there is no experience. (Jagdish N. Sheth And M. Venkatesan, 1968).

Mark I. Alpert (1971)<sup>2</sup> had attempted to compare the usefulness of several common methods of identifying determinant of attributes. Specifically, the objectives of this study were to demonstrate how determinant attributes may be identified for a particular product. Multidimensional scaling allows utilization of paired comparisons of products along several attributes, working backwards to those attributes which provide the best explanation of observed comparisons (Mark I. Alpert, 1971).

G.M.Hostage (1975)<sup>3</sup>

had concluded that in view of complexity involved research scholar has argued that service marketing require not only 4Ps under traditional external marketing. But two other marketing thrusts, viz., Internal Marketing and Interactive Marketing. (G.M.Hostage, 1975).

Langeard, Christopher H.Lovelock and Pierre Eiglier (1981)<sup>4</sup> had revealed that the buyer looks for proofs and evidences while showing intention to avail service in order to reduce uncertainty for ensuring desired quality of service. Therefore the service providers' task is to "Manage the Evidence," to prove Tangibilize the Intangible" (Langeard, Christopher H.Lovelock and Pierre Eiglier 1981)

John E. Swan, I. Fredrick Trawick, and Maxwell G. Carrol (1981)<sup>5</sup> had attempted to investigate issues by using an experiment. The research proposed a theoretical proposition that affect is associated with satisfaction and it could influence other kinds of evaluations that a person may make, a satisfaction-evaluation relationship. The research study did not overcome that major methodological problem but the design of the study includes an analysis of the effect of prior participation in contrast to no prior participation on consumer ratings of food and service. (John E. Swan, I. Fredrick Trawick, and Maxwell G. Carrol, 1981).

Christian Gronroos (1984)<sup>6</sup> advocated for role of internal marketing which describes the work done by the company to train and motivate its internal customers, namely how employees should contact customer and supporting staff engaged and behave while providing services, how to function as a team to ensure satisfaction to customers and technique to successful interactive marketing that describes the employees' skill in handling customer contact (Christian Gronroos, 1984).

A.Parasuraman, Zethaml, and Berry (1985)<sup>7</sup> had developed a bunch of the major factors that have influence over service quality. They had found that customers use basically similar criteria irrespective of the kind of service. The criteria follow viz., Access and Availability, Communication, Competence, Courtesy, Credibility, Reliability, Responsiveness, Security, Tangibles, and Understanding behavior of customers in terms of their aspirations, need, wants etc. respectively (A.Parasuraman, Zethaml, and Berry ,1985).

Glynn Shostack (1987)<sup>8</sup> had suggested that firms engaged as a service provider should take following major steps towards service quality control, viz. to invest in an appropriate personnel recruitment and imparting them proper training, to standardize the performance norms for services process throughout an organization and to monitor customers' satisfaction verses dissatisfaction by concentrating on customer feedback system,



customer surveys and comparison between customers aspirations and experiences, so that errors in service quality can be detected and modified (Glynn Shostack, 1987).

Ernest R. Cadotte, Robert B. Woodruff, And Roger L. Jenkins (1987)<sup>9</sup> had reported the results of a test of deciding construction of norms based on the experience reported by the customers after availing services. The paradigm provided a useful framework for comparing the norms/expectations standards. The research Study supported the contention that performance standards are likely to vary across situations. This finding suggested several related avenues for future research. (Ernest R. Cadotte, Robert B. Woodruff, And Roger L. Jenkins, 1987).

Parasuraman, and Valarie A. Zeithaml (1988)<sup>10</sup> had presented two fold purposes (1) To narrate the development of a multiple-item scale for measurement quality of service titled as SERVQUAL, and (2) To describe potential applications of the scale's properties. It was attempted to study the features of the service that its provider should possess in order to ensure a high quality service image, and the criteria or factors or aspects that customers use in evaluation of service quality. The study instrument was developed to be made applicable to a broad list of services.

(A. Parasuraman, and Valarie A. Zeithaml, 1988).

A. Parasuraman, Valarie A. Zeithaml, Leonard L. Berry (1988)<sup>11</sup> had also described the instrument called as SERVQUAL consisting of a 22-item for examining customers' perception quality of service in as applicable to service oriented and retailing business entities. Briefly the concept and operational aspects of the service quality construct, the procedures used in the construct and refinement of a multiple-item scale for measurement the construct can perform, were described. (A. Parasuraman, Valarie A. Zeithaml, Leonard L. Berry, 1988). Valarie A. Zetthaml, And Leonard L. Berry (1988)<sup>12</sup> had attempted to provide a concise, non-technical summary of each article focusing

particularly on its strategic implications for management.

The scale development process began with the generation of a large pool of items representing various facets of the 10 quality dimensions related with service. This framework, can be accepted and added to rationalize the needs of a particular organization. (Valarie A. Zetthaml, and Leonard L. Berry, 1988).

Anh G. Woodskle, UsaL Fny, RtAert Timothy Daly (1989)<sup>13</sup> had tried to present a framework describing the relationships among the three variables and use it to create models for empirically testing the positive capacity of the proposed service quality, customer satisfaction, together with its behavioral intention relationships. The research paper reported the results of a field study and replication for inpatient hospital service that support the models and framework. They have tried and reported empirical evidence that supports hypothesis that customer satisfaction influences behavioral intention to purchase a service from the same service provider is implied by the marketing concept. Overall customer satisfaction with the service encounter does appear to be a moderating variable between service quality and behavioral intention (Anh G. Woodskle, UsaL Fny, RtAert Timothy Daly, 1989).

Lewis, B.R. and T.W. Entwistle (1990)<sup>14</sup> had pointed out that customer care is concerned with customer satisfaction; She had demonstrated how to measure the factors related with customer care and service through some illustrations, and then turned her attention to the employees and staff members to be used as internal customers in final customer care, concentrating the need for a full understanding of internal marketing and enlightened personnel policies. On service quality delivery she had highlighted some of the emerging and significant issues pertaining to "Managing Promises" to customers, viz., service Guarantees and Service Recovery Procedure to handle customers' problems and complaints (Lewis, B.R. and T.W. Entwistle,

1990).

Kingman-Brundage, J (1991)<sup>15</sup> had dealt with service mapping as tool for service system design and management. Conceptual introduction and background was given in the first section and the second section comprised the nature and characteristics of the service operation. It was advocated that there is no doubt that the service map constitutes an invaluable analytical and communication tool for those charged with responsibility for the quality of service system (Kingman-Brundage, J, 1991).

Barnes, James g., and Judith A. Cumby (1993)<sup>16</sup> had argued that initiative with some quality virtues is likely to reward and few are not rewarding in nature. Accounting systems may be the one way of increasing the chances of identifying successful initiatives and of jettisoning unsuccessful ones. Their case rests on the idea that at a some stage service quality expenditures like most others expenditures results in decreasing returns, and a point will be reached at which the cost of additional services outweigh the benefits. The authors had introduced a model which may be applied to provide input for designing the development of information system by concentrating on the key cost - benefit initiatives related with quality of service. (Barnes, James g., and Judith A. Cumby, 1993).

Wright, Lauren K.(1993)<sup>17</sup> had tried to offer a greater consideration of some key variables as a way of minimizing a myopia and apprehension arises while establishing the legitimate differences between service marketing and other areas of marketing and danger associated that differences within and similarity without may be underestimated. The author had tried to describe that there is a danger of myopia on a number of fronts; ignoring the variation within the service sector; ignoring the similarity between the goods and services; further, the ability to develop comprehensive product marketing strategies may be inhibited (Wright, Lauren K. ,1993)

Naresh K. Malhotra and Francis M. Ulgado,

James Agarwal, Imad B. Baalbaki (1994)<sup>18</sup> stated that dimensions viz., intangibility, heterogeneity, and inseparability can be applied as a basis for a comprising for examining among the factors of service quality between developed and developing countries. Environmental dimensions can also be assigned to each of the ten service quality dimensions. The basic assumption laid down in the paper provides guidance to the managerial personnel as to how the different factors of service quality should be concentrated and used in different way in developed and developing countries. (Naresh K. Malhotra and Francis M. Ulgado, James Agarwal, Imad B. Baalbaki ,1994).

Parasuraman A., Valarie A Zeithaml and Leonard L. Berry (1994)<sup>19</sup> offered insight in to the concept of quality of service together with its dimensions for measurement. Parasuraman, Zeithaml and Berry (PZB) had published extensively on this subject and have conceptualized the term quality of service as "the degree and direction of discrepancy between customers' service perceptions and expectations". Based on this definition, SERVQUAL model was presented, which is helpful in measurement and monitoring of service quality.

The model is generic, skeletal instrument that can be used in variety of contexts including industrial product and internal service contexts. ( Parasuraman A., Valarie A Zeithaml and Leonard I. Berry, 1994).

Stephen W. Brown, Raymond P. Fisk, Mary Jo Bitner (1994)<sup>20</sup> tracked the fast development of s marketing research in the area of services .The emphasis was on general services marketing learning rather than concentrating on specific services sectors. It had resolved that the journey of emergence and growth of the marketing services learning can be understood through three major growth stages from its inception. (Stephen W. Brown, Raymond P. Fisk, Mary Jo Bitner ,1994).s

Pratibha A. Dabholkar (1994)<sup>21</sup> explored a contingency skeleton to provide different

causal relationship among customer satisfaction and service quality emerge under different situation. By assessing the dimensions of causality between customer satisfaction (expectation verses experience) and service quality, the skeleton expand their learning of the customer service assessment process. Sincere and detailed attempt is also made to predict to have learning of different impact on probable customer behavior. This learning may have critical implication and concern for service sector operators. As a research output a thought provoking issue related with the service quality and its relationship with customer satisfaction is emphasized. Organizational sincere concern for designing service quality and imparting training to employee are also shighlighted (Pratibha A. Dabholkar, 1994).

Javier Reynoso, and Brian Moores (1995)<sup>22</sup> had recognized the important dimension of the service marketing to promote service through 'Internal Customers'. Theoretical construct revealed that it is very much natural to recognize internal staff members who are employees of the organization as the crucial link in ensuring service quality and customer satisfaction. Cultivating learning from the employee point of view is a significant and sensitive instrument to manage customer satisfaction. It enabled service provider to apply "Internal Marketing" catering the requirements of the employees so they can be and should be instrumental to satisfy aspirations and latent demand of the customers. (Javier Reynoso, and Brian Moores, 1995).

Robert Johnston (1995)<sup>23</sup> had attempted to retrieve learning the connection among the customers' dissatisfaction/satisfaction with a prolonged of transactions, dealings, or service performance with the customers, and their overall dissatisfaction/satisfaction with the entire service performance.

The objective of the article was to work upon possibilities and some assumptions to provide scope to learn in an enriched way how customers' aspirations, latent demand and

hidden ambitions can be handled during the exercise of performance of service. (Robert Johnston 1995).

Robert Johnston (1995)<sup>24</sup> had obtained clue from the major debatable issues relating to the service quality area. He had observed that major debate in this area related with the commonality and differences among the constructs of quality of service and customer satisfaction. The determinant of customer dissatisfaction were that of integrity, reliability, responsiveness, availability, and functionality. Reliability and Responsiveness is a key component in providing satisfaction and the lack of it is a major source of dissatisfaction was found as a critical component determining service quality. (Robert Johnston, 1995).

Alison Spencer (1996)<sup>25</sup> described how a survey for measurement of consumer satisfaction was carried out at a community mental health center and how as result of that the improvement could be transformed. It was a motivating outcome that the staffs were given rating at a high rate in this study. The study pointed out six various areas where reforms could be carried out. The staffs have taken pain to enforce these suggestions and have introduced various optimist changes as a service provider. The ultimate outcome achieved in a way that the service seekers' opinions have been incorporated into the service draft and performance. As a result of this consumer satisfaction study, the service provider could provide a service that is more comfortable and suitable to the aspirations, requirement and perceptions of its customers (Alison Spencer, 1996).

Elizabeth A. Anderson, Leonard A. Zwelling (1996)<sup>26</sup> explore contention that service quality measurement and management in the area of health care has also started getting increasing importance in the present day scenario. Conclusion was drawn that aspirations and latent demand of customers have a strong impact on an assessment and evaluation of service quality. (Elizabeth A. Anderson, Leonard A. Zwelling, 1996).

Francis Buttle (1996)<sup>27</sup> presented well accepted phenomenon of service marketing that service quality is enjoying so much of significance in terms of its implication so service quality. Service Quality (SQ) is widely regarded as an important tool of corporate marketing and financial performance. The evaluation was carried out as a gap between what the customer expects from service providers, and their assessment of the delivery of performance. Service Quality is as a multidimensional aspect of service marketing. The researcher have attempted to distinguish service quality from customer satisfaction.

The conclusion particularly narrates the nature and significance of validity to make use of the discussed instrument. Validity is said to be achieved when a scale appeared to measure what it intends to measure. (Francis Buttle, 1996).

Patrick Asubonteng, Karl J. McCleary and John E. Swan (1996)<sup>28</sup> provided an insight in the instrument developed to carry out investigation and measurement in the area of service quality. The researchers have conceptualized core components and elements that are reflecting service attributes and used by consumers in evaluating the service quality delivered by service organizations. A fruitful area for future research is to explore the nature and causes of these interrelationships. (Patrick Asubonteng, Karl J. McCleary and John E. Swan, 1996).

Roderick D. Iverson Colin S. McLeod and Peter J. Erwin (1996)<sup>29</sup> had examined impact of employees involvement and trust on both quality of service and acceptance of organizational change. The experimental research had contributed a causal model that had examined the effect of three different categories of independent variables on two measurements. These variables were organizational outcomes, service accomplishment and acceptance of change. Research was carried out with an expectation that the relationship between the three different categories of independent variables and the

organizational outcomes will be affected or mediated by all the three intervening factors. The research is having rational application for introducing and successfully practicing the concept of internal marketing where under the organization needs to establish its relationship with employees and relate it with customer relation and retention strategies (Roderick D. Iverson Colin S. McLeod and Peter J. Erwin, 1996).

Donald J. Shemwell, Ugur Yavas and Zeynep Bilgin (1998)<sup>30</sup> had formulated intention to develop and test, through an experimental research, a causal model that revealed specifically how service quality and satisfaction of customers levels related the factors or elements related with the service transaction like elimination or minimization of complaints to the service provider or to the others (complaint behavior), emotional engagement or bonding with the service or with the service provider as brand (affective commitment), and an enhanced capacity and possibility to continue to have the customer-service provider relationship. (Donald J. Shemwell, Ugur Yavas and Zeynep Bilgin, 1998).

Molly Inhofe Rapert, Brent M. Wren (1998)<sup>31</sup> had presented study two fold. In the First part, attempt was made to describe the viability of the concept of service quality as a strategic concern and critical orientation that can ensure a sustainable and growth oriented competitive edge and long run benefit. The Second part of the study provides research outcomes in terms of results that have supported both the concurrent and long run rewarding effects on performance as a service provider. The authors relied upon the contention and reality of the existing research output that for the service organization the issue is quite sensitive and that of the highest priority to understand the impact of service quality on profitability and other financial implications of the business entity.

( Molly Inhofe Rapert, Brent M. Wren ,1998). David A. Tansik Robert Routhieaux (1999)<sup>32</sup>

had attempted an investigation to find effect of music an inherently stressful environment on customers, persons waiting for surgery of patients in a hospital's surgery waiting room. These persons were either the actual service seeker or customers of the hospital using the hospital's services, or were specifically involved in the decision making make use of the hospital services for the patient's surgery, or it also includes often those assuming responsibility for making financial payments. The results and conclusions of the research had contributed to the ongoing research concerning the role of atmospherics or ambience of a service system in customers' quality assessment and satisfaction evaluations. Inclusion in the overall atmosphere and ambience is a low cost provision can only give relaxations from stress to the concern audience, but having less impact on overall service assessment or evaluation.

(David A. Tansik Robert Routhieaux, 1999).

Duncan I. Simester, John R. Hauser, Birger Wernerfelt, And Roland T. Rust (2000)<sup>33</sup> had described two experiments quasi in nature undertaken by a technically enriched , international firm having intention to access and examine introduction of new quality and its impact on customer satisfaction. The team was handling an assignment related to a marketing research function to decide significant customer needs and make use of largely available qualitative tools and technique to develop a program to improve customer satisfaction to ensure its services to satisfy significant requirements of customers. (Duncan I. Simester, John R. Hauser, Birger Wernerfelt, And Roland T. Rust, 2000).

Kathryn Frazer Winsted (2000)<sup>34</sup> had put forward a contention that detailed research had been undertaken to have enriched understanding on the elements and dimensions or variables of quality of service and the service encounter or transaction with the customers. However, very less attempt is made and research has systematically and specifically carried out to explore what these components,

dimensions, elements, factors or variables really mean to the customer in terms of their expectation about the actual behaviors of service provider. Understanding behavior and approach of the service providers is a critical aspect which as a crucial factor having focus the key competence of the performer for service performance that leads to satisfied customers. The study had examined service operators' behavior that affects customer evaluation of service transaction. These researchers extended their work by investigating into the behavioral aspects related with continuous assessment of service transaction in two different industries and investigating how these behavior can be group. (Kathryn Frazer Winsted, 2000).

Kevin M. Elliott (2000)<sup>35</sup> had invoked debate among authors who had contributed these scales for measuring quality of service which resulted out of its relation with a number of legitimate and important questions concerning alternative conceptual and operational definitions of service quality as perceived or evaluate by the customers. Purpose of this paper was to examine the practical value to marketing managers of the SERVPERF and SERVQUAL approaches to measuring perceived service quality. Specifically, this article had addressed the practical usefulness to marketing managers for measuring expectations and performance perceptions versus measuring performance perceptions only when assessing service quality. It was concluded that debate will obviously continue regarding conceptual, measurement, and practical value aspects, elements having relevance with measurement of quality of service by the instruments viz. SERVPERF and SERVQUAL scales and hoped that this article will be helpful in addressing the practical value issues as they relate specifically to marketing managers (Kevin M. Elliott, 2000).

Mark Gabbott, Gillian Hogg (2000)<sup>36</sup> had considered the impact of silent conversation in customers' assessment of service delivery. Silent conversation has been deeply learned in the Psychology and Psychotherapy field

and has been found to have a unique and deep impact on customer's evaluation and assessment of service performance. Since services are delivered necessarily through personal interactions, it was found that silent conversation plays significant role in service assessment. Their result had revealed sensitive difference in customers' responses to the scenario according to the silent behavior of the service performer (Mark Gabbott, Gillian Hogg, 2000).

Monty L. Lynn and Richard S. Lytle, Samo Bobek (2000)<sup>37</sup> had specifically, examined whether differences in service providers concern and approach prevail among private and State occupied banks, and whether service concern and approach was related with the service performance. The researchers and business managers have extensively found that service orientation is having severe apprehension related to superior customer value. The researches have consistently revealed that an organizational profitability, growth and development of business opportunities, satisfaction of customer, and loyalty of customer are improved by institutional service concern and focus. The research paper provided important observation on the definition of 'service' and narration on 'service gap' that is the difference between what the customers want, and in reality what they get ( Monty L. Lynn and Richard S. Lytle, Samo Bobek ,2000).

Pierre Chenet, Caroline Tynan, Arthur Money (2000)<sup>38</sup> had tried to re-analysed the service performance gap by approximate reconciliation of the empirical results of the research by Parasuraman et al. (1990) with the conceptualizations of Relationship Marketing Theory. The primary object of the research was to form and test a new model of the service performance gap and its related dimensions. A majority of the hypotheses were confirmed by the research. The research paper had concluded that there exist an enrich scope for future research in the area like how to further develop knowledge on the service

business side of the trust commitment theory of relationship marketing. The instrument for measurement could be further developed and confined for use by managers to test the obstacles against the desirable service performance (Pierre Chenet, Caroline Tynan, Arthur Money, 2000).

Andreas Herrmann, Frank Huber, Christine Braunstein (2000)<sup>39</sup> had attempted for bridging the gap between a firm's internal quality reforms and external measurements of customer aspirations and customers satisfaction which is a sensitive but a complicated translation process. Both areas have recognized the requirement to widen their operational focus and attempted to bridge the gap between internal quality and external customers' latent demand and their satisfaction (Andreas Herrmann, Frank Huber, Christine Braunstein, 2000).

Hee-Woong Kim, Young-Gul Kim (2001)<sup>40</sup> had recognized the significance and impact of understanding expectations and latent demand of the consumers in order to provide service quality to the final consumer. The authors had admitted that as against production activities, service sector particularly does not apply stringent process design norms before to launching new services. The service narration does not always ensure that the service will be successful.

It can be concluded out of the research paper that in order to make better version of the model, researchers need to widen the service performance measurement about customer service from its quantification to its qualitative dimensions (Hee-Woong Kim, Young-Gul Kim, 2001).

Praveen K. Kopalle Donald R. Lehmann (2002)<sup>41</sup> had experimented to build a model of sales where base period sales are achieved by quality expectations and price. Customers perceived quality depend on the canvassed and true levels of quality incorporated in the service. It was extended to give shape the model to allow for issues such as a non-linear relationship between the gap and

real and canvassed quality and satisfaction of customer, and customers' tendency to "strategically" reduce their aspirations while evaluating satisfaction to have more satisfaction. (Praveen K. Kopalle Donald R. Lehmann, 2002).

Anjana Susaria, Anitesh Barua, Andrew B. Whinston (2003)<sup>42</sup> had attempted to draw upon the customer satisfaction paradigm by extensively using marketing literature to analyze post purchase satisfaction with ASP services. They had developed a conceptual model of customer satisfaction with ASP tested empirically the assumptions using data from 256 firms availing ASP services. (Anjana Susaria, Anitesh Barua, Andrew B. Whinston, 2003).

Max Moullin (2004)<sup>43</sup> have discussed the eight different requirements of service performance measurement. They carried out research describing it specifically in the context of health care and social care, however these requirements are equally important for all type of service sectors organizations. The study was based upon the assumption and contention that a rationally thought out and well-designed service output performance measurement system is important for ensuring that service organizations to provide for cost-effective, high-quality services that satisfy the aspirations and latent demand of the service users. (Max Moullin 2004).

Robert Johnston (2004)<sup>44</sup> had attempted to offer a concept and definition of service excellence to help service marketers and managers taking in to account its appropriateness and applications. This research was based on over 400 statements of excellent and poor service obtained from around 150 respondents. By using a Grounded Theory Approach, researcher had divided them in to different categories. It was concluded that service excellence is about being "Easy to Do Business With". This has various four key elements viz. delivering the promise, providing a personal touch, going the extra mile, and resolving grievances, difficulties and problems well.

The objective of this research was to work towards providing enriched understanding of service excellence in order to operationalize this state successfully so that service marketers and managers can design, develop and deliver it (Robert Johnston, 2004).

Shahril Shafie, Dr Wan Nursofiza Wan Azmi, Professor Sudin Haron (2004)<sup>45</sup> had experimented and application of a model for customer satisfaction. Applying CARTER Model, this research had measured the aspirations and perceptions of Malaysian Islamic bank's retail customers. They had observed significant relationship and revealed that the perceived service quality was the result of an assessment exercise since customers carry out evaluation between the services they expect with pre-determined perceptions of the services they avail. (Shahril Shafie, Dr Wan Nursofiza Wan Azmi, Professor Sudin Haron ,2004).

Mark Hochhauser (2005)<sup>46</sup> had identified the research problem that the extent to which a researcher can afford to believe in the data and responses that one collects. It was concluded that present day changing market research realities should replace historic research strategies that is myths so that researchers can learn the complexities of the managed care experience from marketing and consumer psychology disciplines that guide how to study consumer behavior. The challenges of the 21<sup>st</sup> Century demands that managed care are to be learned using changing 21<sup>st</sup> century market research methods. Otherwise managed care research will continue to produce results that do not accurately reflect the true nature of the customer's perspective (Mark Hochhauser ,2005).

Naresh K. Malhotra and Francis M. Ulgado, James Agarwal, G. Shainesh, Lan Wu (2005)<sup>47</sup> had presented sound review of literature on service quality, and an extended version of the existing research on the area. Briefly, it had taken into account assessment of service quality becomes complex and challenging because of three different features that are

closely related and involved in services viz., intangibility, heterogeneity, and inseparability. This paper had examined the different perception about service quality elements exist among developed and developing economies. This research explored service quality dimensions such as viz., reliability, customer understanding, responsiveness, competence, courtesy, communication, credibility, security, and tangibility, and admitted that other components can also be potentially important (Naresh K. Malhotra and Francis M. Ulgado, James Agarwal, G. Shainesh, Lan Wu, 2005). David Cohen Christopher Gan and Esther Choong (2006)<sup>48</sup> had examined the influence of several retention-relevant constructs that influences customers' decisions to continue to deal with or to have rational departure from their bankers in New Zealand.

Customers' ratings were studied on these constructs as having strong effects on loyalty to their banks and bankers. Demographic characteristics such as viz., age, gender, educational level, and income were also examined for their contribution to their decisions of having continue to deal with existing banks or finding alternative Avenue for banking transactions. Their findings suggested that the most significant constructs were customer satisfaction followed by banks corporate image and switching barriers involved in the system. It was also evident that customers' age groups and level of education have mainly contributed to explain respondents' intention and possibility to stay with their current banks (David Cohen Christopher Gan and Esther Choong, 2006).

Bruce Cooil, Timothy L. Keiningham, Lerzan Aksoy, & Michael Hsu (2007)<sup>49</sup> had attempt to examined the relationship between customer satisfaction and loyalty in relation to various contexts. This research aimed to provide the first longitudinal assessment of the influence of the changes in customer satisfaction on changes in share of wallet, and to decide the influence of customer age, income, education, expertise, and length of

relationship. Conclusion drawn that the initial satisfaction level and the conditional percentile of change in satisfaction significantly operate to changes in share of wallet. The research had observed two variables viz. Income and length of the relationship as negatively influence the relationship. Other demographic and situational characteristics had shown no impact.

Kuo, Y. -F., Wu, C. -M. and Deng, W. -J. (2009)<sup>50</sup> had explored the study with an intention to design and develop an instrument to assess, and measure quality of service of mobile value-added services and had a further investigation in establishment of the relationships among service quality, perceived value, customer satisfaction, and post-purchase intention as shown by the customers. The main findings revealed that the service quality positively affect both perceived value and customer satisfaction; that the perceived value positively influences both customer satisfaction and post-purchase intention likely to be shown by the customers; that the customer satisfaction positively influences post-purchase intention of the customers; that the service quality has an indirect positive influence on post-purchase intention through customer satisfaction or perceived value; that among the different elements of service quality, "customer service and system reliability" is most influential is customer's perceived value and customer satisfaction, and the influence of "content quality" ranks second; that the proposed model is having reliability and validity testing in terms of explaining the relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile added-value services (Kuo, Y. -F., Wu, C. -M. and Deng, W. -J., 2009).

Jayaraman Munusamy, Shankar Chelliah and Hor Wai Mun (2010)<sup>51</sup> had provided an analytical perspective the concern approaches that have been used for measuring customer satisfaction. It has also explained various opinions and thoughts that have been



developed in concern to the transformation of customer satisfaction measurement across industries and elaborate the research questions related with an investigation. The research highlighted application for marketers in banking industry for improvement in delivery of quality of service. It concluded that having an up dated response system or process for a dissatisfied customer is significant and necessary exercise for any service organization (Jayaraman Munusamy, Shankar Chelliah and Hor Wai May, 2010).

M. Devi Prasad, Dr. B. Raja Shekhar (2010)<sup>52</sup> had put attempt to present a framework designed for providing assistance to Railways to monitor and control the services quality to be delivered to passengers. The research had assessed the passenger Rail Service quality of Indian Railways by designing SQM (Service Quality Management) model on the basis of SERVQUAL and Rail Transport quality. Three new components viz. the Service Product, Social Responsibility and Service delivery were added to the original version of five SERVQUAL dimensions viz., assurance, empathy, reliability, responsiveness and tangibles. The instrument was tested for reliability and validity. The research is having utility for the Railways to monitor, control and improve the service quality. It was concluded that the service quality and service process are interesting subjects to be analyzed in business and also in transportation area, as its results are beneficial to management (M. Devi Prasad, Dr. B. Raja Shekhar, 2010).

Kuang-Wen Wu (2011)<sup>53</sup> had carried out cause and effect research to investigate and find out the relation exist between electronic service quality, satisfaction of customer, electronics recovery of service quality, and loyalty of customer in the area of consumer electronics. He had used quota and snowball sampling for the research study. The findings had revealed that it is found evident that the electronic recovery service quality had direct correlation an aspirational impact on loyalty of customer. Furthermore it is also revealed that electronic

recovery service quality had found no impact on expected value and satisfaction of customer. It was concluded that service providers could design a rational strategy based on the changed Customer Relationship Re-Establishment model to maintain present customer base and to improve practices related with developing and maintaining customer relationship, popularly known as CRM practices (Kuang-Wen Wu, 2011).

### **Epilogue:**

The concept of service quality is a dynamic concept and subjective in nature. Considerable disagreement among research scholars with regards to its definition, components, determinants and measurement. The service quality varies from one type of service to another and accordingly customer expectations also vary, so it is difficult to adopt common model or instrument for its measurement for all types of services and its quality. However following are the essential aspects having significant place in formulation of service marketing strategy: Quality control in service business; Dimensions of service quality; Relationship among quality service & satisfaction and behavioral intentions of customer; Major determinants of quality of service; Measurement quality of service; Role of (Employees) Internal customers in delivering service quality; Measurement of internal service quality; Using customer feedback to improve service quality; Service behavior that leads to customer satisfaction; Finding and bridging the gap between customer and aspirations and requirements; Service quality management & satisfaction retrieved by customers; Paradigm shift from customer satisfaction to customer delight through service excellence and Ensuring customer loyalty through Customers' Relationship Management (CRM) Practices.

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# A Study on Awareness and Perception of Goods and Service Tax in Anand District

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## Abstract:

*Tax has been recognized as one of the main sources of governments' income. Goods and Services Tax (GST), one of the most significant reforms introduced in the history of the Indian fiscal evolution, has come into effect from 1<sup>st</sup> July 2017. GST is expected to have a far reaching impact, much beyond taxes on business, economy and the society. Era in the GST has started single Taxation system and subsumes number of Central and State Taxes. GST is the destination based tax and will be levied and collected on supply of goods & services. There is a paradigm change in the business models for all trade & industries. There is a need to check awareness and perception of people about GST in India. This study attempts to investigate awareness and perception of people about GST in Anand district. Study indicates that those who have knowledge, they are strongly agree that GST will bring ease, it will remove complexity in the law. Those who have knowledge their perception is very positive towards impact of GST in India compared to those who don't have knowledge. This study is expected to provide an understanding to the policy makers on peoples' perception towards GST. Further, this could help to provide a perspective in the areas of increasing awareness pertaining to the benefits of GST, charging and collection mechanism as well as enhancing society's confidence in bringing necessary changes for making it user friendly by the government.*

**Keywords:** Goods and Services Tax (GST); Value Added Tax (VAT); Awareness; Perception

## Introduction:

One of the biggest tax reform i.e. the Goods and Services tax (GST) has already been introduced in India. Despite delays in final implementation of GST, the Indian government has finally introduced GST on July 1, 2017.

The Constitution Amendment Bill which seeks to amend the constitution of India to introduce GST (GST Bill), was passed by the Lok Sabha on 12 May 2015 and by Rajya Sabha on 3 August 2016. (India: GST Impact: E-commerce Sector, 2016)

GST stands for Goods and Services Tax. GST is an indirect tax levied on the value added at each stage from manufacturing to consumption. At present, indirect taxes are being levied by the Centre and State governments, and also the rates charged are different, especially in case of the taxes levied by the State. It includes excise duty, sales tax, service tax, octroi, entertainment tax and many more taxes. With the introduction of the GST, there is only one tax applicable at a unified rate across the country. GST has merged following taxes at the Centre as well as State:

Centre Taxes	State Taxes
Central Excise Duty	State VAT
Additional Excise Duty	Entertainment Tax
Service Tax	Octroi and Entry Tax
Additional Customs Duty (Countervailing Duty)	Purchase Tax
Special Additional Duty of Customs	Luxury Tax

Goods and Service Tax (GST) is an indirect tax levied in India on the sale of goods and services. GST will make India one unified common market. GST is being introduced in the country after a 13 year long journey since it was first discussed in the report of the Kelkar Task Force on indirect taxes. GST is a single tax on

the supply of goods and services, right from the manufacturer to the consumer. Keeping in mind the federal structure of India, there are two components of GST – Central GST (CGST) and State GST (SGST). Both Centre and States will simultaneously levy GST across the value chain. Tax will be levied on every supply of goods and services. Centre would levy and collect Central Goods and Services Tax (CGST), and States would levy and collect the State Goods and Services Tax (SGST) on all transactions within a State. The input tax credit of CGST would be available for discharging the CGST liability on the output at each stage. Similarly, the credit of SGST paid on inputs would be allowed for paying the SGST on output. Thus, Credits of input taxes paid at each stage will be available in the subsequent stage of value addition, which makes GST essentially a tax only on value addition at each stage. Thus, the final consumer will bear only the GST charged by the last dealer in the supply chain, with set-off benefits at all the previous stages. Goods and services are divided into five tax slabs for collection of tax i.e. 0%, 5%, 12%, 18% and 28%. The Central and State Governments have jointly registered Goods and Services Tax Network (GSTN) as a not-for-profit Company for the implementation of GST in the country. The key objectives of GSTN are to provide a standard and uniform interface to the taxpayers and shared infrastructure and services to Central and State/UT governments other stakeholders. (2006-2018 GSTIndia.com.) Thus, GST being a dynamic and comprehensive legislation which shall replace most of the indirect taxes, is going to be a game-changing legislation which will have multi-fold effects in Indian economy.

### Potential benefits of GST:

The benefits for the intended stakeholders are:

- Smooth credit mechanism by decreasing the cascading effect of multiple indirect taxes.

- Broadening of the tax base with reductions in exemptions/concessions.
- Creation of a unified common market.
- Simplified/uniform tax compliance and administration across Indian market (Sachin Menon).

#### (A) To Trade:

- Reduction in multiplicity of taxes
- Mitigation of cascading/ double taxation
- More efficient neutralization of taxes especially for exports
- Development of Common National Market or Common Economic Market
- Simpler tax regime with fewer rates and exemptions
- Increase in 'cost competitiveness' for domestic industries with reduction in tax cost and also reduced cost of compliance

#### (B) To Government:

- Simpler tax system
- Broadening tax base
- Improved compliance and revenue collections
- Efficient use of resources
- Investments out of savings by consumers - due to mitigation of cascading effect, contributes to increase in availability of funds out of savings of consumer - which may be used for financing developmental activities

#### (C) To Consumer:

- Reduction in cost of goods and services due to elimination of cascading effect of taxes
- Increase in purchasing power and real income
- Increase in savings due to decrease in cost
- Increase in investments due to increase in savings

(India, 2015)

### Literature Review:

ZainolBidin, et al. attempted to identify the determinants of attitude towards the GST implementation in Malaysia. According to them, Malaysian business communities are

concerned about GST impact on their business. In order to comply with the new system, taxpayers need to have positive attitude for voluntary compliance. The results revealed and supported that awareness, understanding and preparedness were significantly influencing the attitude towards proposed GST implementation in Malaysia among the business communities. (Zainol Bidin, 2016)

Hafizan Binti Urif study determines employees' attitude on GST in Open University Malaysia (OUM). He identified eight factors as a supportive attitude towards GST like Citizens are not ready with the implementation of GST, The time for the implementation of GST is not suitable, GST will cause an increase in the cost of living, GST has made the small business trapped into hardship, The sentences and wording in the GST guide are lengthy and not user-friendly, The implementation of GST will result in products or services to be more expensive, The newly implemented GST confused the consumer, and the GST system is a legitimate way for the government to collect revenue to manage an economy. While six attitudes identified as not supportive attitude towards GST viz., I am not sure how GST works, GST is fair to the society, GST encourage individuals to save part of their income, GST will give positive impact on me personally, The implementation of GST will improve Malaysia's economy and GST is a good method to replace SST. (Urif, 2016)

Mohamad Ali Roshidi Ahmad et. al. attempted to find out level of awareness and perception to GST among taxpayers in Malaysia. This study covered the secondary school teachers. The results showed that the level of awareness was moderate and the majority of respondents were having a very high negative perception to the impact of GST. (Mohamad Ali Roshidi Ahmad, 2016)

Tan, Lynley Woodward and Lin Mei have done a preliminary study on the compliance attitudes or behaviour of small business

owners (SBOs) by focusing on their tax attitudes toward New Zealand's goods and services tax (GST) system. In particular, their perceptions of deterrence (eg chance of being audited or penalized), tax morale, social norms (eg other business taxpayer's compliance attitudes), perception of the tax system (eg fairness, complexity, tax burden) and tax administration (e.g. trust in authority) are examined. These insights have several implications for tax authorities. (Tan, 2015)

K. Saira, M. A. Zariyawati & L. Yoke-May investigated awareness of Malaysian towards the upcoming of GST implementation. The awareness of GST among respondents is not consistent. This could be due to the lack of understanding or knowledge regarding GST. As a result, this motivates them to disagree with the implementation of GST. (K. Saira)

Mohamad Ali Roshidi Ahmad, Zuriadah Ismail, and Hazianti Abdul Halim conducted a study on Awareness and Perception of Taxpayers towards Goods and Services Tax (GST) Implementation in Malaysia revealed that the level of awareness was moderate and the majority of respondents were not clear about the impact of GST. "It suggested that the Government should have careful planning, detailed preparation, participation of community and extensive public education program etc. are the key factors for the success in the implementation of GST for any country." Nor Iza Binti Ishaket. al. studied Students' Perception towards the Newly Implemented Goods and Services Tax (GST) in Malaysia. The result shows that majority of the students disagree with the methods taken to implement the GST. (Nor Iza Binti Ishak, Students' Perception towards the Newly Implemented Goods and Services Tax (GST) in Malaysia, 2015)

Amanuddin Shamsuddin et. al. investigated the level of awareness and the differences on the acceptance among educators' regarding GST implementation in Malaysia. The study



revealed that there is low level of awareness among educators towards GST implementation in Malaysia. As for the acceptance, the educators moderately accepted the GST implementation. It suggested that as educators are not ready towards GST implementation due to insufficient and unclear information provided by the Government. Government should provide sufficient information pertaining to GST(Amanuddin Shamsuddin, 2014)

### **Need for the study:**

There are many research papers available regarding the awareness and perception towards GST, Implementation and Impact of GST etc. However, similar study has not been conducted in Anand region, hence the present study has been undertaken to fill up that gap. There is no research available regarding what is the perception of people about GST in Anand district. There are mixed reaction of people for GST. Thus, the present study is intended to explain overall awareness and perception about GST.

## **RESEARCH METHODOLOGY**

### **Research Problem:**

The research problem identified is “To explore the level of awareness and perception among people in the Anand District”.

### **Objectives of the Study:**

1. To explore the main sources of information of GST.
2. To understand the awareness and knowledge of GST among people in Anand District.
3. To study perception about GST among people in Anand District.
4. To examine any significant differences in the perception of respondents as per their demographic profile i.e. gender, age and occupation.

### **Nature of Study:**

The present study is exploratory in nature. Researchers intend to explore awareness, knowledge and perception of GST among selected people of Anand District.

### **Sample Selection:**

The population of this study is people residing in Anand District. The category targeted to understand awareness, knowledge and perception of people are Students, Service Person, Business men, Professional. The sample size is limited to only 127 people of Anand District. The sampling technique used is non-probability convenience sampling to study the awareness, knowledge and perception about GST among people.

### **Data Collection:**

#### **[a] Secondary Data:**

The secondary data has been collected using various articles and information from magazines and visit to relevant websites.

#### **[b] Primary Data:**

The primary data has been collected through a survey of people of Anand district by using unstructured questionnaire from literature review of past studies. A questionnaire was sent to all prospective respondents using google.doc services provided by Google. Link was also sent through email, whatsapp to the respondents to get the responses within stipulated time. The email sent to all the email and whatsapp groups but after rigorous efforts only 127 responses received from various groups.

### **Tools of Data Analysis:**

Raw data contained in the research instrument needs to be converted into suitable form so that meaningful findings can be obtained. The data were analyzed using SPSS version 20 and MS-Excel. The data obtained against various questions from 127 valid respondents were properly coded and transcribed into designed format for data analysis.

**Hypothesis of the study:**

- H<sub>01</sub>: There is no significant difference in the awareness and perception on GST as per Occupation of respondents.
- H<sub>02</sub>: There is no significant difference in the awareness and perception on GST as per Age category of respondents.
- H<sub>03</sub>: There is no significant difference in the perception on GST as per Gender of respondents.

Statistical Tools Used for Hypothesis testing:

To test the above mentioned hypothesis, t test and ANOVA test is used. The level of significance is 0.05 (5%) for testing the hypothesis formulated.

**Data Analysis:**

**Demographic Information of Respondents:**

Table 1: Personal attributes of a survey participants

Age (Years)	Gender		Occupation					
	F	%	F	%				
Up to 20	5	3.9	Male	80	62.5	Student	26	20.3
20 to 30	48	37.5	Female	47	36.7	Business	11	8.6
30 to 40	35	27.3	Total	127	99.2	Service	71	55.5
> 40	40	31.3				Self Employed	3	2.3
Total	128	100.0				Professionals	12	9.4
						Others	3	2.3
						Total	126	98.4

Maximum 37.5% survey participants were in the age group of more than 20-30 years followed by more than 40 (31.3%) years age group. 62.5% respondents were male and 55.5% were from service class and 26.4% were having income greater than Rs. 70,000 indicating that they are more concerned with the implications of GST and would like to understand GST in detail.

**Awareness of GST among Selected People of Anand District:**

This section shows the level of awareness, source of information and opinion of future impact of GST by selected people.

Table 2: Awareness about GST

	Yes		No	
	F	%	F	%
Do you update yourself on tax laws applicable to you and your family?	93	76.6	30	23.4
Are you aware of GST (Goods and Services Tax)?	120	93.8	8	6.3
Do you know the date of introduction of GST in India?	91	71.1	37	28.9
Do you understand the concept of GST?	112	87.5	15	11.7
Do you favour the implementation of GST?	115	89.8	10	7.8
Are you aware of VAT (Value Added Tax)?	119	93.0	7	5.5

The above Table 2 indicates that most of the respondents are aware about GST as well as VAT, the date of GST implementation and they are in favour of it also. The maximum survey participants update themselves with tax laws applicable to them. When the respondents were asked about whether they understand the concept of GST, 87.5% of them believe that they know the concept of GST but Table 3 shows different picture. There only 9 (7%) correct responses to the question – ‘Do you think that GST (Goods and services tax), a type of Value Added Tax (VAT) that will replace all types of indirect taxes on goods and services should be implemented to make it easier

for the general public to interpret tax laws?' It indicate that people having idea about GST but does not knowledge of GST.

**Table 3 : Understanding about GST**

	Frequency	%
Yes	103	81.10
No	9	7.09
Don't Know	13	10.24
No Answer	2	1.57

Total	127	100
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**Table 4: Impact of GST on Economy**

	Frequency	%
Positive	99	77.3
Negative	5	3.9
Natural	7	5.5
Don't Know	15	11.7
Total	126	98.4

Maximum survey participants (77.3%) are of the opinion that GST will have a positive impact on the economy of the country in the long run. This is a good sign for Govt. and all of us too.



Figure 1

We can observe from Figure 1 above that Internet and Newspapers and Magazines are main source of information about GST related information followed by Television and Radio & Teacher and Professor. Government hoardings and advertisement are least effective source of information.

**Hypothesis Testing**

H<sub>01</sub>: There is no significant difference in the perception on GST by people as per Occupation of respondents.

**Oneway Anova**

Descriptive of Overall Perception						
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Student	20	3.5160	.75236	.16823	3.1639	3.8681
Business	7	3.7143	.15043	.05686	3.5752	3.8534
Service	61	3.4341	.86137	.11029	3.2135	3.6547
Self Employed	3	3.2000	1.24772	.72037	.1005	6.2995
Professionals	10	3.6600	.41878	.13243	3.3604	3.9596
Others	3	3.6133	.22030	.12719	3.0661	4.1606
Total	104	3.4888	.77171	.07567	3.3388	3.6389

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.143	5	.229	.372	.867
Within Groups	60.198	98	.614		
Total	61.341	103			

To test the above mentioned hypothesis, ANOVA test has been applied. We can see that f value of the test is .372 and p value is .867. As p value is grater then 0.05, we cannot reject the null hypothesis. i.e. there is no significant difference in the perception of respondents as per Occupation.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Awareness	Between Groups	2.094	5	.419	.403	.846
	Within Groups	117.368	113	1.039		
	Total	119.462	118			
Ease	Between Groups	.196	5	.039	.037	.999
	Within Groups	115.347	110	1.049		
	Total	115.543	115			
Perception	Between Groups	1.807	5	.361	.662	.653
	Within Groups	55.165	101	.546		
	Total	56.972	106			

There is no significant difference in opinion on the basis of Awareness, Ease and other positive perception of respondents as per Occupation.

H<sub>02</sub>: There is no significant difference in the perception on GST as per Age category of respondents.

One way Descriptive						
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Up to 20 Years	4	3.8100	.64612	.32306	2.7819	4.8381
20 to 30 Years	40	3.5720	.67356	.10650	3.3566	3.7874
30 to 40 Years	27	3.4978	.65137	.12536	3.2401	3.7555
40 and above	35	3.3337	.93928	.15877	3.0111	3.6564
Total	106	3.4834	.76535	.07434	3.3360	3.6308

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.530	3	.510	.868	.461
Within Groups	59.974	102	.588		
Total	61.504	105			

To test the above mentioned H<sub>02</sub>, ANOVA test has been applied. We can see that f value of the test is .868 and p value is .461. As p value is grater then 0.05, we cannot reject the null hypothesis. i.e. there is no significant difference in the perception of respondents as per Age.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Awareness	Between Groups	2.937	3	.979	.983	.403
	Within Groups	116.535	117	.996		
	Total	119.471	120			
Ease	Between Groups	.516	3	.172	.170	.916
	Within Groups	115.052	114	1.009		
	Total	115.568	117			
Perception	Between Groups	1.619	3	.540	.999	.396
	Within Groups	56.711	105	.540		
	Total	58.330	108			

There is no significant difference in opinion on Awareness, Ease and other positive perception of respondents as per Age.

$H_{03}$ : There is no significant difference in the perception on GST as per Gender of respondents.

T-Test

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Overall Perception	Male	67	3.5063	.89685	.10957
	Female	38	3.4389	.47315	.07675

Independent Samples Test									
Overall Perception	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	7.150	.009	.429	103	.668	.06732	.15676	-.24357	.37821
Equal variances not assumed			.503	102.598	.616	.06732	.13378	-.19801	.33265

To test the above mentioned hypothesis, t-test has been applied. We can see that t value is .429 and p value is .0668. As p value is greater than 0.05 we cannot reject the null hypothesis. i.e. there is no significant difference in the perception of respondents as per Gender.

### Findings of The Study:

Respondents who have knowledge of GST or not all believe that there is lesser knowledge and understanding of GST and needs more efforts from Govt., ICAI etc. to increase awareness. Study indicates that those who have knowledge, they strongly agree that GST will bring ease, it will remove complexity in the law. Those who have knowledge their perception is very positive towards impact of GST in India compared to those who don't have knowledge.

Statistical hypothesis testing shows that there is no significant difference in the perception of selected people as per their occupation (like Students, business man, salaried person etc), age, gender and knowledge about GST. It means all have statistically similar perception about GST.

### Conclusion

It can be concluded that awareness of GST among the people of Anand District is good but the knowledge and understanding is less. So government needs to increase understanding by various means so public can understand properly. As newspaper and internet are main source for information of GST, government should increase the use of newspaper and internet to make people aware about GST. The study indicates that if awareness and knowledge increases, the perception about GST becomes more positive as those who have knowledge of GST tend to be positive in perception. However there is no statistically significant difference in perception of the respondents as per their Age, Gender and Occupation.

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## A Comparison of the Goods and Services Tax between India and Other Countries

Karan Vora

### Abstract:

*This paper aims to compare the Goods and Services Tax between and among various countries with the recent implementation of the same in India. The implementation of GST has been a long ride, and considering that, this paper compares the policy structure and the tax system of various countries in question, and not delve into the murky issues with implementation of GST. India's fate with GST lies with the clear understanding that India, a behemoth of consumers is putting every person under a singular tax structure, simply divided between the states and the central tax, which also divides equally. This paper puts into perspective the tax income from the indirect taxes of various countries with GST for a singular understanding of the benefits of the GST Regime, by putting them into the perspective and the backdrop as percentages of total taxation revenue and GDP; and help conclude into where we stand with India's indirect taxes against the rest of the world.*

Keywords: GST, Comparison, India, GST across the world

### Introduction

Shanti Parva, the final chapter of the Mahabharat, the ancient Indian epic talks about one-sixth of one's income to be submitted as *bali*, or as we know tax. Arthashastra, a seminal text on Political and Economic thought talks about taxation and how the administration should be empowered to collect taxes from the people and that is what the Nation runs on. One cannot reiterate strongly the sheer importance of a robust tax structure. Systemising and streamlining the taxation system or any source of revenue has always been an undeniably important aspect of any government anywhere in the world. In a nation as large as India, with our special demographic design, comparatively low national income, indirect tax based on consumption is in every which way what keeps our boat afloat.

In a move, touted to be as momentous as the midnight declaration of Independence for India in 1947, the midnight session of the Parliament to pass the GST legislation is in every way a major shift from the previous system to the singular tax system in a dual GST policy (of the state and the central GST's) and bringing together the nation into a singular tax umbrella, called, "One Nation, One Tax". GST functions on the basis of every paradigm of value addition on each level with a different tax rate on both, goods and services.

GST may seem as a new phenomenon for India, but is far from being one for the world. The European Union is a pertinent example of a tax structure that is undeniably GST. The treaty of Rome (1957) (regarding the European Union) requires member states to convert their pre-existing tax structure to a harmonised GST system. All newly admitted members into the European Union are required to adopt the harmonised GST system of taxation. Since then multiple nations across the world have shifted to

a harmonised system of GST. Since, umpteen nations all over the world have shifted to GST, and quite seemingly so, it was high time that India too goes the same way.

The One Hundred and First Amendment of the Constitution of India, officially known as The Constitution (One Hundred and First Amendment) Act, 2016, introduced a national Goods and Services Tax in India from 1 April 2017. The GST is a Value added Tax (VAT) and is proposed to be a comprehensive indirect tax levy on manufacture, sale and consumption of goods as well as services at the national level.<sup>1</sup>

### Research Problem

GST as a singular taxation system for all of India brings with itself challenges of understanding how different the nation's tax income will be very soon. India, being an emerging world economy needs to assess its relative position in the world. The central problem this paper deals with is to find out where India places in the world charts of GST being an important and pivotal source of income for the Indian Government? Do we have much scope for improvement?

### Research Objectives

This paper aims to understand and cross-tabulate the indirect federal taxes in the form of GST from various countries around the world and to then compare that, with that, of Indirect Taxes from India.

The research also aims to study the percentage of the total tax revenue contributed by GST in their respective cumulative national tax incomes and as a percentage of GDP's.

#### Research Methodology

The research is a work of qualitative and theoretical look of GST and the application of GST across the world. Data of GST rates as prevalent in various countries is an amalgamation of data from official and unofficial, yet reliable sources.

Data from the respective nations' budgets,

government publications on tax sources and statistical data from Organisation for Economic and Cooperative Development has been used for tabulation purposes.

Tabulation for acquiring the per capita tax contribution, as percentage of total taxation and as percentage of GDP.

### Theoretical analysis of GST as it exists across different parts of the world

Before we dive into the GST contributions of various countries in the world, as a function of their GDP, total tax incomes and other aspects, it is imperative that there needs to be a clear understanding of the GST regimes of the nations across the world. India has recently passed and implemented GST from July 1st, 2017; bringing about a sea change in the tax system of India.

**France:** GST was firstly implemented in France in the year 1954 with four different slabs of rates of tax. The rates therein were chargeable in the slabs of 2.1%, 5.5%, 10% and 20%. Among the tax rates, 20% is the standard rate most often allocated to most of the goods sold in France.

**Canada:** The Canadian model of GST governs the taxation regime under three schemes which are the Federal GST, the Joint federal and the separate federal. Federal tax is the generally accepted tax system while the joint federal runs on the basis of the synchronized behaviour of the economy and states. The final one, the separate federal GST, which only applies to the province of Quebec as it is deemed to be a quasi-independent province under the nation of Canada. The GST rate in Canada is 5% on supplies of goods and services; and in some provinces, there is a harmonised sales tax which amounts to 15%.<sup>2</sup>

**United Kingdom of Great Britain and Northern Ireland:** The UK there has three tax rates, of 0%, 5%, and 20% which are applicable on goods as well as services. Similar to France, most of the goods sold in UK are covered under 20% tax slab rate.<sup>3</sup>



**Australia:** In the case of Australia, the GST is a federal or as we know a central tax which is collected by a singular supreme authority, functioning under the central government and is thereafter divided amongst the states without any conflict arising through the aforementioned process. The GST was firstly introduced in 2000 with the tax rate of 10% which is consistent till date. The implementation was relatively smooth compared to most other countries. There are discussions and plans to increase this to a tax slab rate of 15%.

**Singapore:** Singapore, like many other nations, follows a single and consistent tax rate system on every purchase or application of service. GST was initiated in Singapore in 1994 with a flat GST rate of 3% which was lowest in the market then. Since 2007, the GST rate has been incremented to 7%, which is still a competitive rate for most economies of the strength of that of Singapore. The GST is the second largest source of government income after taxes from the corporate Information Technology industry.

The GST was part of a larger tax restructuring exercise to enable Singapore to shift its reliance from direct taxes to indirect taxes. The government argued that tax reform was necessary to maintain Singapore's competitiveness, to sustain long-term growth and job creation. The government also argued that with an ageing population, Singapore's income tax base was expected to decline. With a broad-based GST, the taxation burden would be more evenly spread among the population.

**Japan:** Japan introduced a central, singular, indirect consumption tax system in 1989 at a rate of 3%. This was increased to 5% in 1997, which many tout as the reason for the Asian country went into recession. Presently the tax rate stands at 8% for all items across the nation, be it goods or services. <sup>4</sup>

**China:** China implemented GST in the 1994. In 2016, Beijing completed Value Added Tax (VAT) reforms to replace the conflicting Business Tax system. Doing away with business tax and other taxes and switching to

VAT contributed to bursting of the Chinese real estate bubble. <sup>5</sup>

**Vietnam:** In Vietnam, there are three rates, at 0 per cent, 5 per cent and 10 per cent are applied to most goods and services. There are certain exceptions to this.

**Malaysia:** Malaysia after a prolonged debate implemented GST at 6%. <sup>6</sup>

**New Zealand:** GST was implemented in New Zealand in the year 1986 and since, it had been applying the taxes on everything at a single and consistent rate which is 10%, but till 2010. The tax rate after 2010 has been increased to 15% which is henceforth for all purchases of goods and services. It must be noted that there is no tax on residential rents and financial services. In New Zealand, businesses are empowered to recover the GST as an input cost.

**Brazil:** With respect to the Brazilian model of GST, we infer that it is independent in comparison to other nations and has a dividing rule of taxes between the states and the centre. Brazil has six tax slabs which range from 0%, 1.65%, 2%, 7%, 12% and all the way to 17%.

**Ukraine:** Ukraine has a standard tax rate which is 20%. There are certain supplies which are also subject to lower rates under 0% and 7%. Usually, the rate of 7% is applicable to pharmaceutical products, medicinal products and medical equipment while the export of goods and services being tax free.

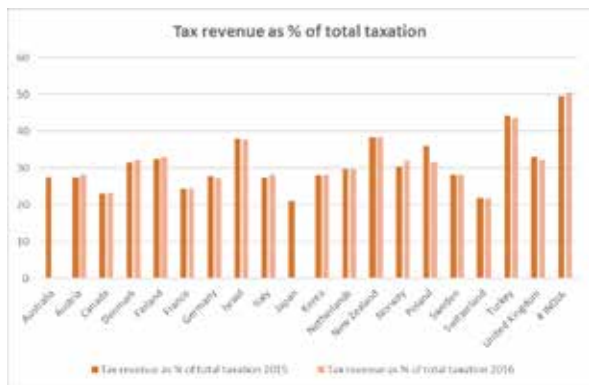
These are a few of the countries which have implemented GST in the last few decades and their respective brief history with the present tax slab rates. This does not do us justice unless we account for the respective contributions of the GST rates as percentages of their respective Total Taxation Revenues and as a Percentage of the GDP.

These are tabulated and put represented graphically henceforth.

Tax revenue as % of total taxation (Percentage)		
Country	2015	2016
Australia	27.5	..

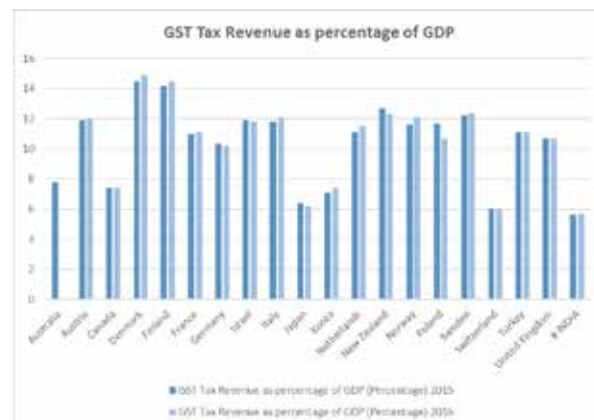
Austria	27.3	28.1
Canada	23.1	23.3
Denmark	31.6	32.3
Finland	32.4	32.9
France	24.3	24.5
Germany	27.8	27.1
Israel	38.0	37.7
Italy	27.3	28.1
Japan	21.0	..
Korea	28.0	28.1
Netherlands	29.6	29.6
New Zealand	38.4	38.3
Norway	30.4	32.0
Poland	35.9	31.8
Sweden	28.1	28.2
Switzerland	21.8	21.7
Turkey	44.3	43.6
United Kingdom	32.9	32.2
# INDIA <sup>vii</sup>	52	50.48

Finland	14.2	14.5
FranceZ	11.0	11.1
Germany	10.3	10.2
Israel	11.9	11.8
Italy	11.8	12.1
Japan	6.4	6.2
Korea	7.1	7.4
Netherlands	11.1	11.5
New Zealand	12.7	12.3
Norway	11.6	12.1
Poland	11.7	10.7
Sweden	12.2	12.4
Switzerland	6.0	6.0
Turkey	11.1	11.1
United Kingdom	10.7	10.7
# INDIA <sup>vii</sup>	5.6	5.7



To understand what these graphs represent, we have to undertake a comparative study of these economies as functions of their nation's political structures. For the sake of clarity and uniformity the countries in the above tables are primarily advanced democracies which makes the taxation system more reliable and less akin to whims and fancies of non-democratic power struggles.

GST Tax Revenue as percentage of GDP (Percentage)		
Country	2015	2016
Australia	7.8	..
Austria	11.9	12.0
Canada	7.4	7.4
Denmark	14.5	14.9



It is clearly visible that India has a higher percentage of total taxation revenue coming from Indirect taxes, and this is set to increase all the more with the GST regime in place at present.

### **Observations and Analysis (Research Findings)**

With the objective to compare where India stands with the Indirect taxes at present, we clearly see that India is not very high on the graph which compares the percentages of GDP. As a developing economy, we cannot ignore the fact that India has a long road to go before consumption taxes become a major contributor. In this factor we are somewhere at par with Switzerland, but we must not forget that India as an economy is much more diverse than that of Switzerland and there is a massive difference in population and demographics. India's GDP contribution of Indirect taxes being similar to Japan is in some ways a good indicator to every economy in the world of the robustness of the Indian consumer and the large market we have to offer to any investor or seller from abroad.

Yet, 50.48% of Indian Tax Revenues come

from Indirect Taxes, and it is widely known that direct taxes are currently at a record low. This is the highest in all the countries we have compared on the graphical representation. This means that India has to start to diversifying the tax base. The implementation of GST, with rates all the way up to 28% is important to note here, as it would facilitate in keeping the luxury items and consumers of those items in the market, earning greater taxes from them, while reducing the tax rates on other commodities makes the tax base larger and hence increases the revenue of the government. India's consumer behaviour needs a little more study which can help our government better informed decisions about the tax slab rates and make them a little more competitive for the world market.

### **Scope for further Research**

Because we have not yet completed a year into the implementation of GST, we are unable to compare the revenue collections of GST with these countries, and it would paint a better picture when we are able to do so, and that is definitely something that can be considered to be a continuation of this research.

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## The Study On an Impact of Big Data Analytics on Banking Sector

Nisha Parmar

### Abstract:

*The banking industry has evolved by leaps and bounds over the past decade, when it comes to operations and service delivery. Surprisingly though, most banks have failed to utilize the information within their own databases. The big data revolution happening in and around 21st century has found a resonance with banking firms, considering the valuable data they've been storing since many decades. This data has now unlocked secrets of money movements, helped prevent major disasters and thefts and understand consumer behaviour. Banks reap the most benefits from big data as they now can extract good information quickly and easily from their data and convert it into meaningful benefits for themselves and their customers. Banks internationally are beginning to harness the power of data in order to derive utility across various spheres of their functioning.*

Keywords : Big Data, Fraud Detection & Prevention, Enhanced Compliance Reporting, Customer Segmentation, Personalized Product Offerings

### Introduction

Big Data – The world is becoming digitalized and interconnected so that the amount of data has been exploding every minute. To manage those data records, it requires extremely powerful business intelligence. The problem starts during data acquisition, when the large amount of data require us to make decisions about what data to keep, what to discard and how to store, so that data can be kept reliable and accurate. Big data refers to datasets whose size is beyond the ability of typical database software to capture, store, manage and analyse. It can be described as a massive volume of both structured and unstructured data which can't be stored using traditional databases. An example of big data might be petabytes or Exabyte's or even zettabytes of data which consists of billions to trillions of records that are collected from millions of people all from different sources. The sources of data may come from web, sales, customer contact centre, social media, mobile data etc.

Big Data is a term associated with large datasets that come into existence with the features of volume, variety, velocity and veracity of data. Data variability, value and complexity are some other features that are used with big data.

### Review of The Letrature

#### Big Data Technologies for 2018

Big Data is growing at an exponential rate and it is expected that the most of the customers will be attracted to it in the upcoming year due to its tremendous prospect of progressing a business. There has been an enormous increase in the variety, volume, and velocity of the data, which is a proof that 2018 will witness changes worth reminiscence.

- Cognitive Technology
- Predictive Analytics
- Huge IOT Impact
- Discovery of Knowledge and Search
- Prompt and Accurate Machine Learning
- Enhanced Cyber Security
- Dark Data Disclosure
- Data Virtualization
- Data Quality
- Data Integration

## 1.2 Characteristics Of Big Data

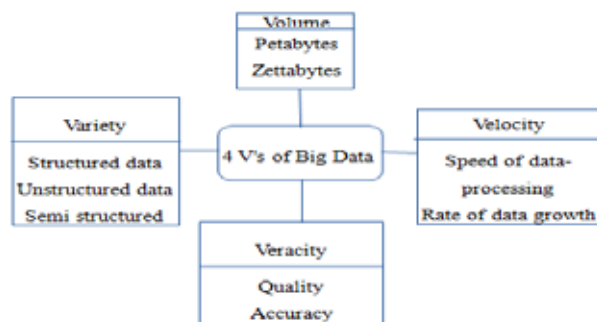
There are four characteristics of Big Data: **4V's**

**Volume:** Vast amount of stored data that can be gathered and analysed effectively.

**Variety:** Type of data that may be structured, unstructured, transactions, video/audio, text and log files.

**Velocity:** Rate of data change and speed of data available for analysis.

**Veracity:** Data integrity and extend of trust in the data to confidently use it to make decision. In the context of banking transaction analysis,



volume corresponds to the thousands of banking transactions that occur every second in every day.

Variety refers to the type of data that are used in transaction process.

Velocity refers to how quickly data can be processed for analytics.

Veracity deals with analysing the banking transactions to make decisions on it with the aim of finding fraudulent transactions if any. These factors are important for analysing transactions to find frauds and taking immediate corrective action.

## 1.3 Sources Of Big Data

- Social Networking: Facebook, Twitter, Instagram, Google + etc.
- Sensors: Used in Aircraft, Cars, Industrial Machines, Space Technology, CCTV Footage.
- Data Created From Transportation Services: Aviation, Railways, and Shipping etc.
- Online Shopping Portal: Amazon, Flipkart, Snapdeal, Alibaba etc.
- Mobile Applications: What's App, Google Hangout, Hike etc.
- Data created by Different Firms: Education Institute, Banks, Hospital, Software Companies etc.

## 1.4 Big Data Analytics

Big data analytics is a technology that searches useful information such as a relation rule, a hidden value from huge data. When data volumes reach big data proportions, parsing it for meaningful information requires very powerful data analytics. The domain of Big Data Analytics is concerned with the extraction of value from big data which are significant, previously unknown, implicit and potentially useful. These insights have a direct impact on making a useful decision from the interpreted data. With the help of right analytical tools, big data can detect various frauds done with banking services. The analytics tools perform the following activities:

- Collects data from many enterprise sources.
- Performs a deeper analytics on the data.
- Provides a fine view of security information.
- Achieves real-time analysis of streaming data.

### 1.4.1 Analytics Challenges with Big Data

- Traditional RDBMS fail to use Big Data.
- Big Data cannot fit in the single computer.
- Processing of Big Data in single computer will take a lot of time.

- Through traditional analytics it would be costly to analyse Big Data.
- Scaling of Big Data through traditional RDBMS is expensive.

#### 1.4.2 Big Data Analytics Tool and Technology HADOOP

It is an Open Source Framework where we can analyse the data cheaper and faster with the cluster of commodity hardware. It provide massive storage for any kind of data with enormous processing power.

##### **HDFS (Hadoop Distributed File System):**

The java based scalable that stores data across multiple machines without prior organization.

**Map Reduce:** It is a software programming model for processing large sets of data in parallel

**Hadoop= HDFS + Map Reduce**

## 2. Research Methodology

The study is analytics and descriptive in nature and is based on secondary data, data sources like research papers, review papers, Published papers of related BIG DATA and its uses in banks, Banks' websites, Bank's Publications, newspapers etc. A list of the related articles from various Journals is also used to develop the basic idea about the particular big-data's uses in banking sector.

### Objective

- To study the emerging new trend of big data in Indian Banking sector.
- To understand the big data uses in Fraud Detection & Prevention, Customer Segmentation.
- To know the benefits of big data in Personalized Product Offerings.
- To know Challenges of Big Data for Banks.

**SCOPE :** The study covers only uses of the big data technological developments (new trends) in Indian banking services only.

## 3. Application of big data In Banks

The big data, either acquired from some source or internally generated data is to be used in the manner that is in sync with the organizational vision and mission. The banks should be able to use this data so as to meet the predetermined objectives which can be either to reduce Cost, minimize the time taken in the processing, so launch a new product to name a few. All these and others factors and variable should ultimately lead to the better decision making in the organization

### 3.1 Advantages of Big data for banks

Big Data Analytics In Banks Data creation  
Collection of data Banks own HDFS for storing  
Fetching of data Model formation  
Knowing the insights of model Taking action  
Using big data and technology, the banks may be able reap some of the following benefits:

- Find out the root cause of issue and failures
- Determine the most efficient channel for a particular customers
- Identify the most important and valuable customer
- Prevent the fraudulent behaviour
- Analyse the risk and the risk profiling
- Customised products and customised marketing communication
- Optimise human resources
- Customer retention

### 3.2 Benefits Of Big Data Analytics in Banking Sector

#### 3.2.1 Fraud Detection & Prevention

One of the biggest problems faced by the banking sector is fraud. And Big Data will allow banks to make sure that no unauthorized transactions will be made, providing a level of safety and security that will raise the security standard of the entire industry. It help Bank to detect, prevent and eliminate internal and external fraud as well as reduce the associated cost.

### 3.2.2 Enhanced Compliance Reporting

Banks now have access millions or even billions of customers' needs, and they can now use Big Data to cater to them in a more meaningful way. Cloud based analytics packages can sync in real time with your big data systems, creating actionable insight dynamically. Big Data will expand the banking industry in a way that will allow them to earn more revenue through cost reduction. And by cutting down on unnecessary costs, the banking industry can provide customers with exactly what they're looking for, instead of irrelevant information.

### 3.2.3 Customer Segmentation

Big Data will give banks deep insights into customer spending habits and patterns, simplifying the task of ascertaining their needs and wants. By being able to track and trace each and every customer transaction, banks will be able to categorize their clients based on various parameters, including commonly accessed services, preferred credit card expenditures, or even net worth. The benefit of customer segmentation is that it allows banks to better target their clients with relatable marketing campaigns that are tailored to cater to their requirements. Herman Shooster, Founder of Globalresponse.com, was a big advocate of Big Data for Customer segmentation .

### 3.2.4 Personalized Product Offerings

Customer segmentation can further be used to create and deliver new schemes and plans, aimed directly at the specific requirements of their customers. By analysing past and present expenses and transactions, a bank can get a clear understanding of how to get the highest response rate from their clients. Creation of personalized product offerings will cater to an untapped niche of personalized services that gives banks the ability to create more meaningful client relationships.

- **Risk Management:** Bank analyse

transaction data to determine risk and exposures based on simulated market behaviour, scoring customer and potential clients.

- **Contacts Centre Efficiency Optimization:** It help Banks to resolve problems of customers quickly by allowing Banks to anticipate customers need ahead of time.
- **Customer Segmentation for Optimize Offers:** It provides a way to understand customers' needs at a granular level so that Banks can deliver targeted offers more effectively.

### 3.2.5 Management

The early detection of fraud is a large part of risk management, and Big Data can do as much for risk management, as it does for fraud identification. Big Data locates and presents big data on a single large scale that makes it easier to reduce the number of risks to a manageable number. Big Data plays a pivotal role in integrating the banks requirements into a centralized, functional platform. This reduces the banks chances of losing data, or ignoring fraud. By keeping up with Big Data and other newer global trends, the banking industry will be able to get a better understanding of client requirements, so that they can provide such services in a timely manner. The task of implementing Big Data on a large scale is just taking shape, with many IT departments concerned about the transition to high-tech IT infrastructure. But when it comes to Big Data adoption in the banking industry, the sooner the better!

### 3.3 Customer Churn Analysis

It help Banks to retain their customers by analysing their behaviour and identifying patterns that lead to a customer abandonment. **Sentiment Analyst:** This tool help the Bank to analyse social media to monitor user sentiment



toward a firm, brand or product.

**Customer Experience Analytics:** It can provide better insight and understanding, allowing Banks to match offers to a customers' needs.

### 3.4 Challenges Of Big Data For Banks

Change is permanent but seldom anybody is ready to accept this and this is one of the most important aspects in the implementation of big data. The corporates and banks will have to make a gradual and swift shift towards "data culture" which may not be as easy as written on a piece of a paper. This not only calls for the overall strategic policy implementation but also the training and development of the employees to acquire the right skill set would be important parts of the big data programme. The banks will have to identify the existing Employee's current skill set and map the gaps required for implementation of the data analytics and cater for the various training programmes to address the issue. Furthermore the banks will have to align the recruitment policy for the big data and analytics to attract and retain the right talent. The banks will have to go the recruitment of the people who possess the skill set to handle and implement the latest technologies of the big data. The implementation of big data calls for the technologies such as Apache Hadoop, NoSQL. This also calls for the investment in infrastructure which adds to the cost for the company. Infrastructure cost may not only include the physical assets but also the data storage and

Data warehouse is huge cost which calls for additional COST.

#### 3.4.1 Challenges in Big Data Analytics for Banking Industry

- Legal Challenges
- Regulatory Challenges
- Privacy Challenges
- Security Challenges

- Data Quality
- Organizational Mind-set
- Data Visualization
- Data Integrity
- Offer management & Relationship pricing
- Inefficient Data Management
- Lack of capability of the Back end systems
- Compliance
- Regulatory reporting
- General Ledger transformations
- Dynamic Relationship based pricing

#### 3.4.2 Issues Needed To Be Resolved To Provide Effective and Secure Banking Transactions

- Security
- Anonymity (Privacy)
- Authentication
- Divisibility

## Conclusion

The aforementioned points are the predictions that are set to make the Big Data one of the most happening trends of 2018. Starting from cognitive technology to retrieving the dark-data, Big Data will take care of the backlogs and will make sure the security breaches are managed in a strategic manner. Let's hope that the latest technologies and the enhanced version of Big Data will make the technology highly advanced as well as secured.

Banks are creating large amount of data day by day. But storing and processing of Big Data is faster when it stored in distributed manner. 'Hadoop' framework provides such kind of network where Big Data distributed among different systems. By adding more nodes data can be stored in different location. If any node fails then there is no loss of data. By the use of big data banks run more profitably.

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## A Study on Impact of Merger and Acquisition on Financial Performance of Selected Indian Companies

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### Abstract:

Corporate sector widely uses Mergers and Acquisition as a strategic tool to strengthen and maintain their status in the economy. M&A are a useful tool for corporates for expansion of business into new market and gives easy entrance to reach out for new technologies. In this research paper, the researchers examined the impact of M&As on financial performance of selected Indian companies which took place between 2010 to 2014 using various ratios such as net profit margin, return on net worth, return on capital employed, current ratio, quick ratio, earnings per share and dividend per share are taken for study. The study reveals that the companies involved in M&As have experienced mixed effects. Some of it has positive effect in profitability performance whereas some have positive effect on liquidity performance. But overall result shows that these M&As have no significant impact on financial performance of acquirer companies.

### Key Words:

Mergers, Acquisition, Ratio analysis

### Introduction

After the third wave of M&A spree in 2007, it took tall toll of recession in the year 2009 when global economy fell short to tackle this situation. In the year 2010, M&A activities started to gain and upward trend in India. Then again M&A activity witnessed downward trend in India. According to institute for mergers, acquisitions and alliances, deals worth US\$ 194.80 billion were announced from 2010 to 2014 which showed less numbers of deals but higher valued M&A transactions. This era witnessed M&A which were not confined to any particular sector of Indian economy. After 2010, many sectors witnessed high valued mergers such as Reliance Power Limited acquired RNPL for mammoth amount of Rs 50,000 crore, merger of Kotak Mahindra bank with ING Vysya in for whooping amount of Rs 15,000 crore. While Sun Pharma acquired Ranbaxy for a gigantic US\$ 4 billion which was considered amongst large deals in pharmaceutical sector. Even present year of 2018 witness one of the world's and India's largest E-commerce deal when American retail giant Walmart announced his entry into Indian market with the help of 77% stake acquisition of Flipkart at \$16 billion (Rs. 1.12 Lakh crore) (Sharma, 2018) and many more will be witness in following months.

### Review of Literature

Abdulazeez, Suleiman, & Yahaya, 2016 "Impact of Merger and Acquisitions on the Financial Performance of Deposit Money Banks in Nigeria" examined the impact of mergers and acquisitions on the financial performance of deposit money banks of Nigeria. The results shows an enhanced financial performance leading to improved financial efficiency because of merger and acquisition. Furthermore, the

mergers and acquisitions have improved the financial performance of most banks in Nigeria significantly. Overall it shows an improved performance on the part of selected commercial banks of Nigeria due to merger and acquisition. (Abdulazeez, Suleiman, & Yahaya, 2016)

**Gupta & Banerjee, 2017 “Impact of merger and acquisitions on financial performance: Evidence from selected companies in India”** analyzed the impact of merger and acquisitions on financial performance of the companies. The finding of this study shows that after merger profitability, liquidity performance of selected companies have diminished so one can say that profitability, liquidity position indicators have not significantly improved. The result shows that leverage indicators significantly degenerated after the merger and acquisitions. The results from the analysis of selected sample of before and after merger on profitability and liquidity position shows that different industries have different effects of merger on profitability and solvency position in India.

**Duggal, 2015 “Post Merger Performance of Acquiring Firms: A Case Study on Indian Pharmaceutical Industry”** examined the impact of mergers on the operating and financial performance of Indian pharmaceutical companies. The result of the study shows that merger have significant impact on the performance as compared to the period before merger but the impact is more clear in the immediate year after merger. The findings also unveiled that profitability has improved upto 1 year. Similarly the sustainability of post merger performance has conspicuously absent in the post merger (+3,+5) period. The positive improvement is not retained in 3 and 5 years period. Therefore the results reported in the study show sthat the positive results of merger is only of 1 year (short run).

**Girnara, 2016 “Merger and Acquisition in Banking Sector”** conducted a case study in which focused on the merger of kotak Mahindra bank and ING vysya bank, The

result of the study was as followed. Financial analysis shows that post-merger financial performance there is increase in net interest income, increase in profitability, improve liquidity, increase in number of customers, share price has been increased of kotak mahindra bank.

**Veena & Patti, 2016 “Financial Performance Analysis of Pre And Post Merger in Banking Sector: A Study with Reference to ICICI Bank Ltd”** examined financial performance of ICICI bank. The result of the study shows that banks were able to perform better after merger with other banks as all the ratios studied in it had positive effect. Also post-merger performance standards were improved after merger compared to the pre-merger performance standards so it can be said that impact of merger on ICICI Bank Ltd was positive.

#### **Research Methodology**

**Research Problem:** The scope of the study is to determine whether the mergers and acquisitions by Indian companies have any impact on their financial performance or not with the help of various financial ratios and statistical tools such as paired T-test.

**Research design:** Present study of mergers and acquisitions is analytical in nature. The mergers and acquisitions which took place from 2010 to 2014 have been taken for the study using convenient sampling method. The data collected for this study is based on secondary sources. This study is based on secondary sources. For this purpose, annual reports and media (press) releases are collected from the websites of respective companies, ratios are obtained from money control website. To understand the impact of merger and acquisition of selected study, data is taken 3 years prior to M&A and 3 years post M&A.

#### **Objective of study**

- To analyse the impact of M&A on profitability performance of selected Indian (acquirer) companies.

- To analyse the impact of M&A on liquidity performance of selected Indian (acquirer) companies.
- To analyse the impact of M&A on per share performance of selected Indian (acquirer) companies.
- To analyse the impact of M&A on overall financial performance of selected Indian (acquirer) companies.

### Formulation of hypothesis

$H_{01}$ : There is no significant difference between pre and post M&A profitability performances of selected Indian (acquirer) companies.

$H_{11}$ : There is a significant difference between pre and post M&A profitability performances of selected Indian (acquirer) companies.

$H_{02}$ : There is no significant difference between pre and post M&A liquidity performances of selected Indian (acquirer) companies.

$H_{12}$ : There is no significant difference between pre and post M&A liquidity performances of selected Indian (acquirer) companies.

$H_{03}$ : There is no significant difference between pre and post M&A per share performance of selected Indian (acquirer) companies.

$H_{13}$ : There is a significant difference between pre and post M&A per share performance of selected Indian (acquirer) companies.

**Sampling technique:** The researcher have studied various sources related to mergers and acquisitions which took place in India. It was found that from 2010 to 2014 deals amounted to \$194.80 billion were announced in India.

### Net Profit Margin

Table No. 1 Net profit margin of selected Companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Difference (X-Y) <sup>2</sup>
RPL	10.87	6.47	4.4	19.36
HGS	15.75	11.04	4.71	22.1841
TML	13.12	13.04	0.08	0.0064
JSWSL	8.26	4.23	4.03	16.2409
Wipro	18.18	18.65	-0.47	0.2209
TCL	13.85	2.15	11.7	136.89

So the researcher have collected the list of the Indian companies which engaged in M&A from 2010 to 2014.

### Samples For The Study

From the above criteria, 10 M&A samples are selected for the study

- Reliance Power Limited merged with Reliance Natural Resource Limited on July, 2010.
- Hinduja Global Solution acquired On-line Support Inc. on August, 2011.
- Tech Mahindra Limited merged with Mahindra Satyam on March, 2012
- JSW Steel Limited merged with JSW Ispat Steel Limited on September, 2012
- Wipro limited acquired L.D. Waxson Group on December, 2012.
- Thomas Cook (India) Limited merged with Sterling Holiday Resorts (India) Limited on February, 2014.
- Sun Pharmaceuticals Limited acquired Ranbaxy Laboratories Limited on April, 2014.
- Reliance Industries Limited acquired Network 18 Media & Investments Limited, TV18 Broadcast Limited on May, 2014.
- Tata Consultancy Services Limited merged with Computer Management Corporation Limited on October, 2014
- Kotak Mahindra Bank limited merged with ING Vysya Bank Limited November, 2014.

### Data Analysis And Interpretation

SPL	-12.16	-10.97	-1.19	1.4161
RIL	5.84	10.54	-4.7	22.09
TCS	27.73	26.18	1.55	2.4025
KMBL	17.2	17.07	0.13	0.0169

Chart No. 1 Net profit margin of selected Companies



Table no. 1 and Chart no. 1 provides the information of net profit margin of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. For net profit margin, Reliance Industries have huge positive impact of M&A as its net profit margin went 10.54% from 5.84%. Whereas Wipro Limited has somewhat positive impact of merger as net profit before acquisition was 18.18 which rose a little to 18.65. But same cannot be said for Reliance Power, Hinduja Global, JSW Steel, Thomas Cook and JSW Steel as their net profit margin have drastically decreased. Thomas Cook has the highest negative effect of M&A as its profit margin went 2.15% from 13.85%. Hinduja Global also have negative impact as its net profit margin decreased from 15.75% to 11.04% which shows that after merger, profit margin was decreased by 4.71%. Reliance Power

also struggles to cope up with the merger as its net profit margin went down 6.47% from 10.87%. Same goes for JSW Steel, as prior to merger its net profit margin was 8.265% which decreased to 4.23%. Tata Consultancy is also struggling to raise its profit as its net profit margin prior to merger was 27.73% which decreased post-merger to 26.18%. Kotak Mahindra Bank and Tech Mahindra had very little negative impact as net profit margin was 17.2% and 13.12% respectively prior to merger which decreased post-merger to 17.07% and 13.04% respectively. Sun Pharmaceuticals is constantly struggling but steadily reducing its loss as its net profit margin was before but after acquisition, it have reduced its loss till somewhat extend as prior to merger it was -12.16% post-merger it is -10.97%.

Table No 1.1 Paired T-Test of Net profit margin of selected companies

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	11.864	9.84	10.3716	10.2419	9	1.432	2.262	H <sub>0</sub>

Above table no 1.1 indicates the paired t-test of net profit margin of selected companies. At

5% level of significance,  $T_c = 1.432$  whereas  $T_t = 2.262$ . So,  $T_c$  is less than the  $T_t$ . Therefore the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A Profitability performance of selected Indian (acquirer) companies.

**Return on Net Worth**

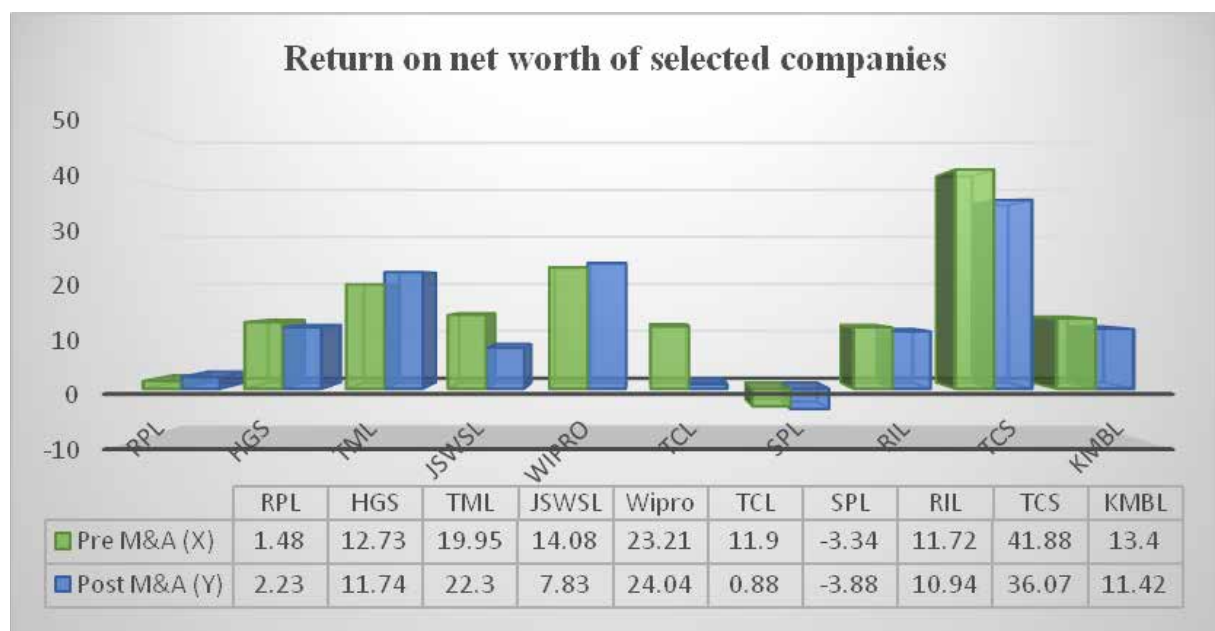
Table No. 2 Return on net worth of selected Companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Difference (X-Y) <sup>2</sup>
RPL	1.48	2.23	-0.75	0.5625
HGS	12.73	11.74	0.99	0.9801
TML	19.95	22.3	-2.35	5.5225
JSWSL	14.08	7.83	6.25	39.0625
Wipro	23.21	24.04	-0.83	0.6889
TCL	11.9	0.88	11.02	121.44
SPL	-3.34	-3.88	0.54	0.2916
RIL	11.72	10.94	0.78	0.6084
TCS	41.88	36.07	5.81	33.7561
KMBL	13.4	11.42	1.98	3.9204

**Chart No. 2 Return on net worth of selected Companies**

Table no. 2 and Chart no. 2 provides the information of return on net worth ratio of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. Impact of M&A was positive on only three companies; Reliance Power, Tech Mahindra and Wipro Limited. Return on net worth of reliance power prior to merger was 1.48 %

which increased to 2.23 %. Tech Mahindra got highest positive impact of merger as its return on net worth increased 22.3 % from 19.95 % which is highest amongst the sample. Followed by Wipro as its return of net worth was 23.21 % prior to acquisition; whereas post-acquisition, it is 24.04 %. Thomas Cook have most negative impact of merger as its return on net worth was 11.9 % prior to merger but it reduced greatly to 0.88 %. Followed by



JSW Steel, as return on net worth prior to merger was 14.08 % but post-merger it have been reduced to 7.83 %. Tata Consultancy’s return on net worth prior to merger was 41.88 % which reduced to 36.07 % post-merger which shows highest negative impact on return on net worth of the sample. Kotak Mahindra bank has same situation as return on net worth prior to merger was 13.4 % which reduced to 11.42 %. Hinduja Group also suffered, when its return on net worth decreased from 12.73 % to 11.74 %. Reliance Industries also suffered as its return on net worth prior to acquisition was 11.72 % which decreased post- acquisition to 10.94 %. Return on net worth of Sun Pharmaceuticals prior to acquisition was -3.34 % due to constant loss which further deteriorated it to -3.88 %.

**Table No. 2.1 Paired T-Test of rerun on net worth of selected companies**

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	X	Y	X	Y	9	1.804	2.262	H <sub>0</sub>
	14.701	12.357	12.3001	12.1076				

Above table no 2.1 indicates the paired t-test of return on net worth of selected companies. At 5% level of significance, T<sub>c</sub>= 1.804 whereas T<sub>t</sub> = 2.262. So, T<sub>c</sub> is less than the T<sub>t</sub>. Therefor the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A Profitability performance of selected Indian (acquirer) companies.

**Return on Capital Employed**

Table No. 3 Return on capital employed of selected companies

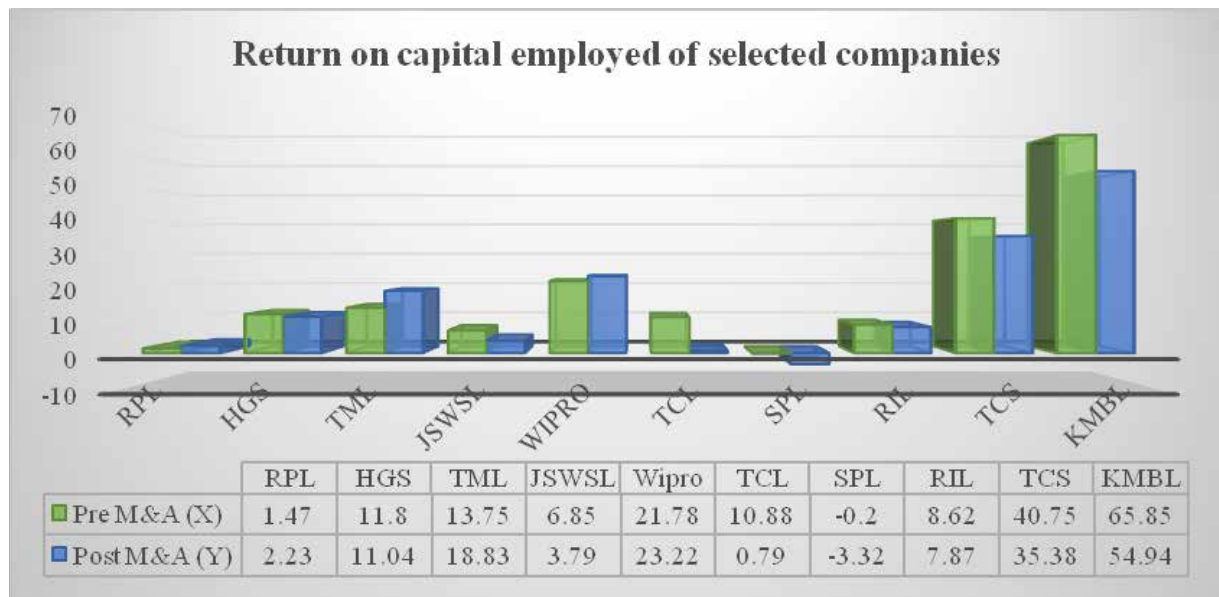
Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Difference (X-Y) <sup>2</sup>
RPL	1.47	2.23	-0.76	0.5776
HGS	11.8	11.04	0.76	0.5776
TML	13.75	18.83	-5.08	25.8064
JSWSL	6.85	3.79	3.06	9.3636
Wipro	21.78	23.22	-1.44	2.0736
TCL	10.88	0.79	10.09	101.808
SPL	-0.2	-3.32	3.12	9.7344
RIL	8.62	7.87	0.75	0.5625
TCS	40.75	35.38	5.37	28.8369
KMBL	65.85	54.94	10.91	119.028

**Chart No. 3 Return on capital employed of selected companies**

Table no. 3 and Chart no. 3 presents return on capital employed of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. Reliance power, Tech Mahindra, Wipro and Reliance have positive impact of M&A on Return on capital employed. Tech Mahindra have highest positive impact of merger as its return on capital employed prior to merger was 13.75% which got up to 18.83% highest amongst samples. Followed

by Wipro as its return on capital employed prior to acquisition was of 21.78% which went up to 23.22%. Return on capital employed of Reliance Power also showed some positive impact as it went 2.23% from 1.47%. Kotak Mahindra Bank had most negative impact as its return on capital employed went down from 65.85% to 54.94%. Thomas Cook have the second most negative impact as its return on capital employed went down to 079% from 10.88%. Return on capital employed of Tata Consultancy went down from 40.75% to





35.38%. Sun Pharmaceuticals is constantly suffering as its return on capital employed was negative -0.2% but it further deteriorated as it is of -3.32%. JSW Steel is not far behind as return on capital employed prior to merger was 6.85% which post-merger decreased to 3.79%. Hinduja and Reliance Industries also have negative impact as pre-merger return on employed was 11.8% and 8.62% respectively, which post-merger decreased to 11.04% and 7.87%.

**Table No 3.1 Paired T-Test of rerun on capital employed of selected companies**

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10					9	1.688	2.262	H <sub>0</sub>
	18.1550	15.4770	20.3994	18.20657				

Above table no 3.1 indicates the paired t-test of return on capital employed of selected companies. At 5% level of significance, T<sub>c</sub>= 1.688 whereas T<sub>t</sub> = 2.262. So, T<sub>c</sub> is less than the T<sub>t</sub>. Therefore the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A Profitability performance of selected Indian (acquirer) companies.

### Current Ratio

Table No. 4 Current ratios of selected companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Diff. (X-Y) <sup>2</sup>
RPL	2.36	2.52	-0.16	0.0256
HGS	1.28	0.96	0.32	0.1024
TML	1.28	1.77	-0.49	0.2401
JSWSL	0.74	0.86	-0.12	0.0144
Wipro	1.87	2.08	-0.21	0.0441
TCL	1.27	1.06	0.21	0.0441
SPL	2.89	0.56	2.33	5.4289
RIL	1.69	0.9	0.79	0.6241
TCS	2.38	4.53	-2.15	4.6225
KMBL	0.035	0.05	-0.015	0.00023

Chart No. 4 Current ratios of selected companies

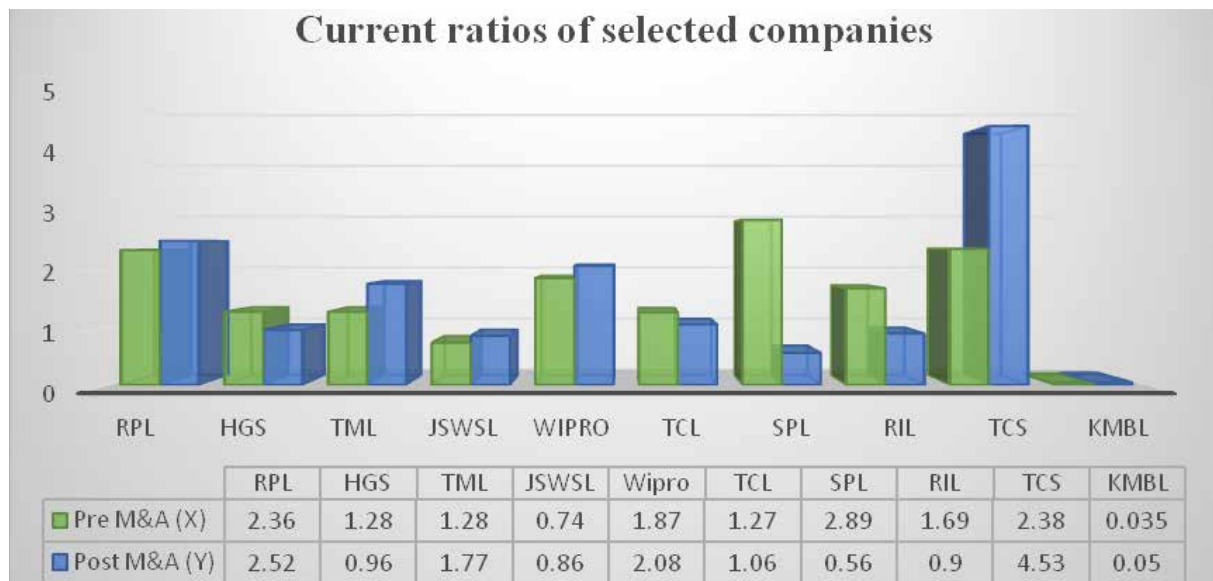


Table no. 4 and Chart no. 4 explains Current ratio of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. highest positive impact of M&A on Current ratio is on TCS as it increased from 2.38 times to 4.53 times. Followed by Tech Mahindra as its current ratio went up from 1.28 times to 1.77 times. Wipro also showed some improvement as its current ratio went up from 1.87 times to 2.08 times. Reliance Power showed positive impact as its ratio went from 2.36 times to 2.52 times. JSW Steel also showed positive impact as its ratio went up from 0.74 times to 0.86 times. Kotak Mahindra’s current ratio was positively affected as it risen from 0.035 times to 0.05 times. Sun Pharmaceuticals have the most negative impact of M&A from the samples as its current ratio deteriorated from 2.89 times to 0.56 times. Reliance Industries are not far behind as its current ratio post-acquisition is 0.9 times which was 1.69 times before acquisition. Hinduja Group’s current ratio prior to merger was 1.28 times which decreased to 0.96 times. Thomas Cook have least negative impact as its current ratio went from 1.27 times from 1.06 times.

Table No. 4.1 Paired T-Test of current ratio of selected companies

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	11.5795	1.5290	.8452	1.2851	9	0.144	2.262	H <sub>0</sub>

Above table no 4.1 indicates the paired t-test of current ratio of selected companies. At 5% level of significance, T<sub>c</sub>= 0.144 whereas T<sub>t</sub> = 2.262. So, T<sub>c</sub> is less than the T<sub>t</sub>. Therefor the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A liquidity performance of selected Indian (acquirer) companies.

**Quick Ratio**

Table No. 5 Quick ratios of selected companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Diff. (X-Y) <sup>2</sup>
RPL	2.36	2.52	-0.16	0.0256
HGS	1.28	0.96	0.32	0.1024

<b>TML</b>	1.28	1.77	-0.49	0.2401
<b>JSWSL</b>	0.43	0.52	-0.09	0.0081
<b>Wipro</b>	1.8	2.06	-0.26	0.0676
<b>TCL</b>	1.27	1.06	0.21	0.0441
<b>SPL</b>	2.34	0.3	2.04	4.1616
<b>RIL</b>	1.2	0.61	0.59	0.3481
<b>TCS</b>	2.38	4.53	-2.15	4.6225
<b>KMBL</b>	18.17	16.18	1.99	3.9601

Chart No. 5 Quick ratios of selected companies

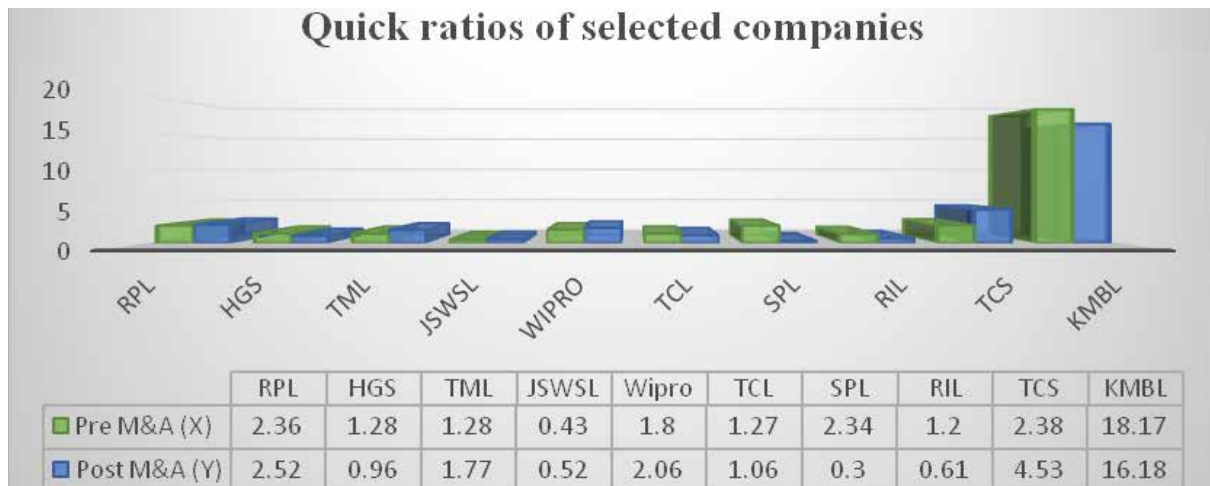


Table no. 5 and Chart no. 5 explains Quick ratio of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. highest positive impact of M&A is on TCS as its quick ratio escalated from 2.38 times to 4.53 times. Tech Mahindra’s quick ratio increased from 1.28 times to 1.77 times. Wipro’s quick ratio also risen from 1.8 times to 2.06 times. Reliance Power’s quick ratio went up from 2.36 times to 2.52 times. JSW Steel also have positive impact of merger on its quick ratio as it went up from 0.43 times to 0.52 times. Sun Pharmaceutical have most negative impact of M&A as its quick ratio deteriorated from 2.34 times to 0.3 times. Kotak Mahindra Bank also have negative impact as its quick ratio went down from 18.17 times to 16.18 times. Reliance Industries is not far behind as it also have negative impact because its quick ratio went down from 1.2 times to 0.61 times which is almost half. Hinduja Group also have negative impact as its quick ratio went down from 1.28 times to 0.96 times. Thomas Cook also suffered as its quick ratio decreased from 1.27 times to 1.06 times.

Table No. 5.1 Paired T-Test of quick ratio of selected companies

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	3.2510	3.0510	5.2802	4.7811	9	0.523	2.262	H <sub>0</sub>

Above table no 5.1 indicates the paired t-test of quick ratio of selected companies. At 5% level of significance, T<sub>c</sub>= 0.523 whereas T<sub>t</sub> = 2.262. So, T<sub>c</sub> is less than the T<sub>t</sub>. Therefor the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A liquidity performance of selected Indian (acquirer) companies.

### Earnings per Share

Table no. 6 Earnings per share of selected companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Diff. (X-Y) <sup>2</sup>
RPL	0.87	1.33	-0.46	0.2116
HGS	37.63	40.66	-3.03	9.1809
TML	50.94	63.39	-12.45	155.003
JSWSL	83.38	84.6	-1.22	1.4884
Wipro	24.13	28.83	-4.7	22.09
TCL	2.3	0.42	1.88	3.5344
SPL	2.57	0	2.57	6.6049
RIL	64.69	83.94	-19.25	370.563
TCS	71.78	111.82	-40.04	1603.2
KMBL	17.54	18.06	-0.52	0.2704

Chart No. 6 Earnings per share of selected



Table no 6 and Chart no 6 provides information of earnings per share of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. TCS have highest impact of merger on its EPS as prior to merger it was Rs. 71.78 which escalated to Rs. 111.82 per share. Reliance industries is not far behind as its EPS increased from Rs. 64.69 to Rs. 83.94 Tech Mahindra’s EPS prior to merger was Rs. 50.94 which increased to Rs. 63.39 post-merger. Wipro’s EPS also escalated to Rs. 228.83 from Rs. 24.13. Hinduja’s EPS improved from Rs. 37.63 to Rs. 40.66 post-acquisition. JSW steel’s EPS went up post-merger from Rs. 83.38 to Rs. 84.6. Same goes for Kotak Mahindra Bank and Reliance Power as their EPS prior to merger were Rs. 17.54 and Rs. 0.87 which improved to Rs. 18.06 and Rs. 1.33 respectively.

Table No. 6.1 Paired T-Test of earnings per share ratio of selected companies

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	35.5830	43.3050	30.8065	40.5303	9	-1.845	2.262	H <sub>0</sub>

Above table no 6.1 indicates the paired t-test of EPS ratio of selected companies. At 5% level of significance, T<sub>c</sub>= -1.845 whereas T<sub>t</sub> = 2.262. So, T<sub>c</sub> is less than the T<sub>t</sub>. Therefore the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A per share performance of selected Indian (acquirer) companies.

### Dividend per Share

Table No 7 Dividend per share of selected companies

Company Name	Pre M&A (X)	Post M&A (Y)	Difference (X-Y)	Square of Diff. (X-Y) <sup>2</sup>
RPL	0	0	0	0
HGS	18.33	20	-1.67	2.7889
TML	3.83	10.33	-6.5	42.25
JSWSL	9.75	10.67	-0.92	0.8464
Wipro	6	9	-3	9
TCL	0.38	0.42	-0.04	0.0016
SPL	3.58	2.5	1.08	1.1664
RIL	9	10.5	-1.5	2.25
TCS	26.33	56.5	-30.17	910.229
KMBL	0.7	0.67	0.03	0.0009

Chart No 7 Dividend per share of selected companies

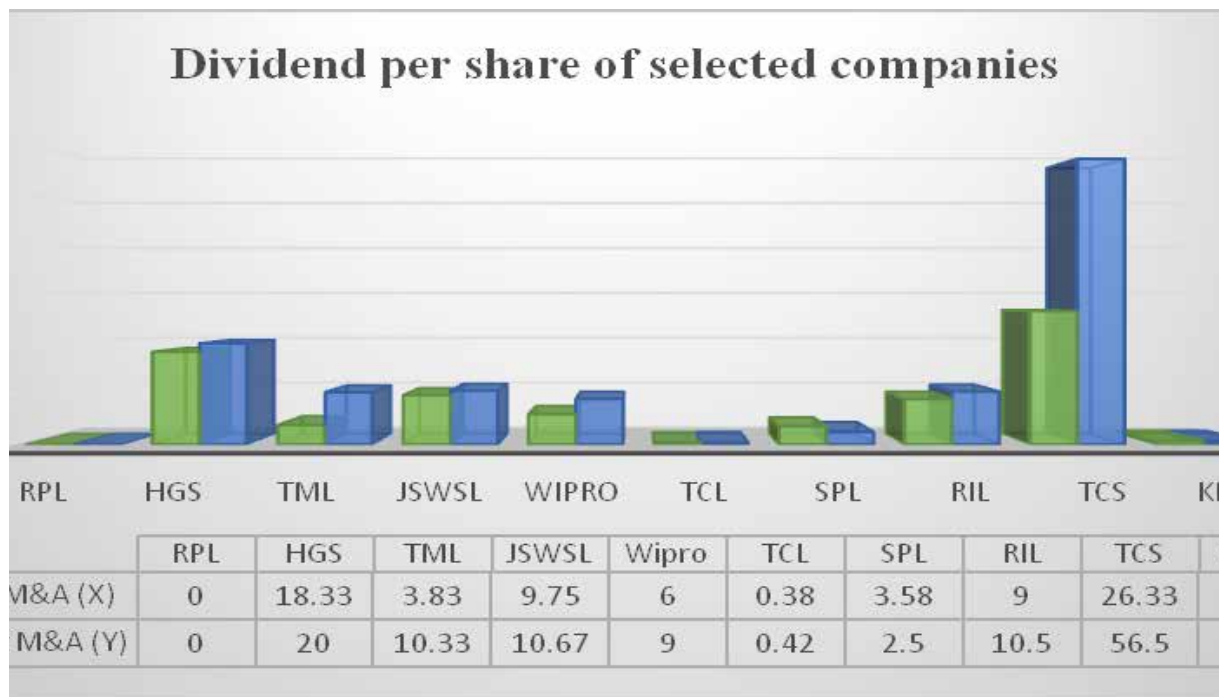


Table no 7 and Chart no 7 provides information of dividend per share of selected companies which have been calculated 3 years prior to M&A and 3 years post M&A. Highest dividend per share was declared by TCS post-merger of Rs. 56.5 which prior to merger was Rs. 26.33. Tech Mahindra's DPS prior to merger was Rs. 3.83 which escalated to Rs. 10.33. Wipro's DPS prior to acquisition was Rs. 6. which improved to Rs. 9. post-acquisition. Hinduja's DPS increased to Rs. 20, from Rs. 18.33. Reliance industries also have positive improvement of DPS as it went up from Rs. 9 to Rs. 10.5. JSW steel and Thomas cook' DPS were Rs. 9.75 and Rs. 0.38 respectively which increased post M&A to Rs. 10.67 and 0.42 respectively. Reliance power have not declared any dividend so that there is no DPS prior and post-merger. Whereas Sun pharmaceuticals and Kotak's DPS is decreased post M&A to Rs. 2.5 and Rs. 0.67 respectively which prior to M&A was of Rs. 3.58 and Rs. 0.7.

**Table No. 7.1 Paired T-Test of dividend per share ratio of selected companies**

N	Mean		S.D.		D.F	T <sub>c</sub>	T <sub>t</sub>	Result
	X	Y	X	Y				
10	7.79	12.059	8.5803	16.8547	9	-1.444	2.262	H <sub>0</sub>

Above table no 7.1 indicates the paired t-test of earnings retention ratio of selected companies. At 5% level of significance, Tc= -1.444 whereas Tt = 2.262. So, Tc is less than the Tt. Therefore the researcher could not reject the null hypothesis that there is no significant difference between pre and post M&A liquidity performance of selected Indian (acquirer) companies.

### CONCLUSION

After globalisation, M&A activities in India have increased to a greater extent. Big companies of India are going for larger mergers and acquisition which are amounted to millions and more year by year. Mergers and Acquisitions have become a greater tool for corporate sector to obtain growth and market extension. But it is double edge sword which can make or break a company. For the study research has selected 10 mergers and acquisitions by Indian companies which took place from 2010 to 2014. From the study it was found that M&A have both negative and positive impact on financial performance of companies. Mergers and acquisitions of Reliance Power Limited, Tech Mahindra Limited, JSW Steel Limited, Wipro Limited and Tata Consultancy were successful as they retained and increased their profitability, liquidity and per share performance post M&A. Whereas, Hinduja Global Solutions, Thomas Cook (India) Limited, Sun Pharmaceuticals Limited, Reliance Industries Limited and Kotak Mahindra Bank Limited had chosen wrong companion to purchase as their profitability, liquidity and per share performances post M&A struggled to the great extent.

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## Trust is Short. Have A Security! A Case Study of Ashley Madison: Biggest Data Breach In 2015

Dr. Sarvesh Trivedi & Dr. Preethi Luhana

### Abstract:

*The Year 2013 was seen as the “Year of Mega Breach” while the Year 2014 saw the term “Double Mega Breach”. The New York Times devoted more than 700 articles related to data breaches. The Internet’s ability to amplify knowledge began as a purely academic and scientific tool but its true potential was only discovered when it started running throughout. This ubiquitous nature of Internet has brought “Ease of Use” and made itself a “Second Life” on Virtual Planet for every online citizen. However, today this “Ease of Use” is misused a lot. Cyber Security has become a serious issue for every nation. The present case study is the biggest case of data breach in the Year 2015. It is an eye opener about the privacy of sensitive personal information and security of customers’ data. The Author himself is a ‘Certified Cybercrime Investigator’ and ‘Certified Network Security Professional’ and has made an attempt to give due justice to the Information available from different sources.*

**Keywords:** Data Breach, Cyber Crime, Cyber Security, Privacy, Ethical & Social Issues, Internet

### Introduction

August 18, 2015 brought crisis for Military and Security Agency members<sup>1</sup>, Politicians, Public Administrators, Government Officials, Celebrities, many high-level executives and many more civil servants. Their personally identifiable information is suddenly made available on Internet. They begin to shame, some high-profile people start resigning. An independent Internet security researcher, Troy Hunt<sup>2</sup> is contacted by hundreds of people through email. They confessed, pleaded, apologized. Callie<sup>3</sup>, a daughter of a 56 Year old Pastor and Seminary Professor, receives a call that her father has killed himself. Professor’s wife, Christi, discovers her husband’s body along with a suicide note: “I am very sorry, my name is there”. A Police Officer, Captain Michael Gorhum<sup>4</sup> working at San Antonio Police Department in Texas since last 25 years, shoots himself from a self-inflicted gun on the same day. These two have killed themselves on August 24, 2015 because of one and only reason that their names were found on the leaked database of Ashley Madison<sup>5</sup> – An online dating service and extra marital social networking affair service in Canada. Ashley Madison name was created from two popular female names; “Ashley” and “Madison”. The site was founded in 2002 by Darren Morgenstern with the slogan, “Find Your Moment” (since July 2016); “Life is short. Have an affair”. (Until July 2016). In 2014<sup>6</sup>, \$115M sales was recorded with a growth rate of 45%. The site was managed and monitored by Avid Life Media (ALM), a parental company having a membership of around 39 million people across 53 countries. ALM was even planning an IPO on London Stock Exchange. Ashley Madison claimed that their service would be “100% anonymous and discreet”. The service

was free for women while for men it was a paid fee on a monthly basis with a guarantee that they would really find ‘someone’ what they were looking for otherwise would return money back. The site also allowed users to hide their account profiles for ‘free’ and ‘full delete’ option to completely remove their profile which includes all messages, site usage history, personally identifiable information and photographs with \$19.99 fee charge.

A group of hackers claimed themselves as “Impact Team” have put around 37 million people database (names, photographs, email ids, credit card details etc. treated as Personally Identifiable Information – almost 300 GB of data) online on August 18, 2015. What motivated hackers? – The Impact Team claimed about unfair practice by the site. They revealed that ‘full delete’ option was not removing the user’s profile permanently rather all data was recoverable. There was no anonymity at all. In the initial ransom note they threatened Ashley Madison and its fellow site ‘EstablishedMen.com’ to shut down otherwise to post the users’ data online. The team said, *“Nobody was watching, No Security” when it broke into Ashley Madison’s servers repeatedly over the past few years*. One hacker said, *“[We] got in and found nothing to bypass”*.

In July 2015, the Impact Team sent the initial

ransom note but Avid Life Media ignored it so hackers leaked 10 GB of customers’ private data online. This data included 37 million emails, 9.6 million credit card transactions records and their associated usernames, and hashed passwords. Former CTO Raja Bhatia<sup>8</sup> announced that the customers data was not belong to their site. Screwed up hackers leaked another 20GB of data including CEO Noel Biderman’s personal emails with a note *“Hey Noel, you can admit it’s real now.”* (Figure 1) According to one security analyst, this dump consisted of; nearly 3M lines of source code of a website, 73 different GIT repositories, poorly hashed (md5) password credentials. The Impact Team wrote: *“They make \$100,000,000 in fraud a year. Not very surprised they didn’t shut down. May be lawyers can shut them down now. They sound like politicians, cannot stop lying”*.

Following data was made online.

Source courtesy: <http://www.hydrize.org/2015/08/ashley-madison-full-dump-has-finally-leaked-again/Figure>

I: Mail to CEO Noel

This leaked data revealed following things:

**1. It took 10 days to crack 11 Million Ashley Madison Passwords<sup>9</sup>**

One good thing about 37 million users’ login

## Terrible! Top 30 Worst Ashley Madison Passwords

PASSWORD	NUMBER OF USERS	PASSWORD	NUMBER OF USERS	PASSWORD	NUMBER OF USERS
123456	120511	696969	8801	madison	5219
12345	48452	ashley	8793	asshole	5052
password	39448	fuckme	7893	superman	5023
DEFAULT	34275	football	7872	mustang	4865
123456789	26620	baseball	7710	harley	4815
qwerty	20778	fuckyou	7458	654321	4729
12345678	14172	111111	7048	123123	4612
abc123	10869	1234567890	6572	hello	4425
pussy	10683	ashleymadison	6213	monkey	4296
1234567	9468	password1	5959	000000	4240

credentials was that the leaked password file contained hashed passwords. The Password cracking team, CynoSure Prime thought that it could be protected using Bcrypt algorithm which really slows down the password cracking process but the team recognized a weakness after auditing and analyzing the source code of a website. They identified that login credentials were protected using MD5 – a poor hash algorithm. So rather than cracking the Bcrypt they brute forced MD5 hashes and obtained nearly 11.2 Million passwords. Following figure shows the list of top 30 worst passwords:

*Figure 6:* Top 30 Worst Ashley Madison Passwords

## 2. Insider Threat by a Woman Employee<sup>10</sup>

A former founder of famous antivirus software company, John McAfee made a controversial statement that “Ashley Madison was not hacked, it’s an inside job”. He audited and analyzed the leaked database and it let him to draw some conclusions; (A). The hack was a done by single person, (B). The breach was committed by an insider, (C). A woman could be behind it. He put evidences to prove his conclusions that the offender had deep knowledge about technology because the data was matched with actual MySQL database dumps. Anyone can just copy-paste data into .csv file. About the woman he said that some

words which were “scumbags” and “cheating dirbags” could be used by woman only.

## 3. Ashley Madison was secretly running online escort service.<sup>11</sup>

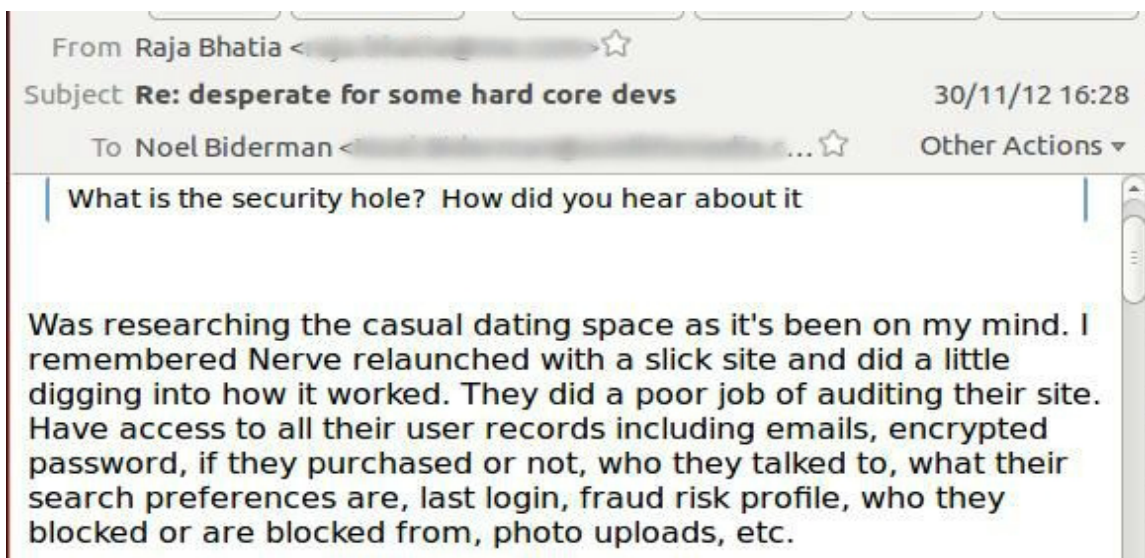
It was found that the shell company called Pernimus Limited described as one of Avid Life Media’s legal entities through the investigation of leaked data. This shell company leased an escort website Escorts.ca that have activated anti-prostitution raids by law enforcement agencies. The Daily Dot also reported that besides the escort website, the employees of Avid Life Media were actively recruiting escorts for another website “Arrangement Finders”.

## 4. Ashley Madison’s Founder wanted to hack a competing site to steal emails.<sup>12</sup>

Raj Bhatia, the CTO of ALM wrote a casual email to Biderman “Nerve.com (Competitor’s website) dating site has a huge security hole”. This encouraged Biderman to steal users’ emails. He wrote in return conversation, “What is the security hole? How did you hear about it?” Bhatia then expressed that he did little digging about how nerve.com site works. Following conversation was found in the leaked database.

*Figure 7:* Conversation between Raj Bhatia and Noel Biderman

Raj actually had dumped entire database of



nerve.com which can be revealed from the following figure.

*Figure 8:* Further Conversation between Raj Bhatia and Noel Biderman



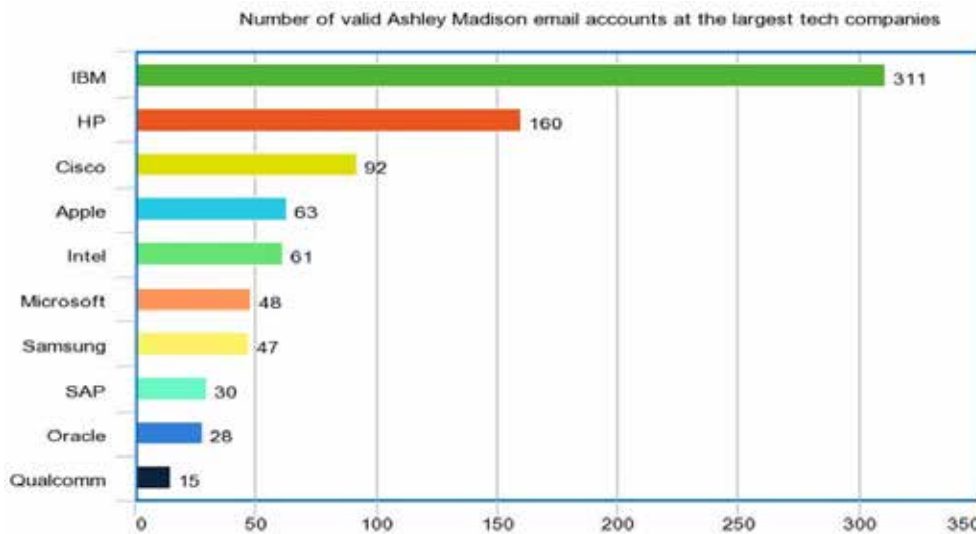
the leaked database and identified that large no of customers were from big tech companies. Following figure shows the list of Top 10 giant Techie Companies:

**5. Ashley Madison was much popular among Top 10 Big companies<sup>13</sup>**

The data crunching firm Dadaviz has analyzed

*Figure 9:* Top 10 Big Tech Companies that love to cheat

Further, the firm confirmed that one third (34%) of all the Ashley Madison accounts



were fake. However, over 24 million email addresses were real and that to from above top 10 big tech companies.

**Learning<sup>14</sup> from this Data Breach:**

1. Nothing is completely secure online.
2. Despite of privacy policy, no one can guarantee that your personal identifiable information (PII) will not be leaked.

3. One should not share their real names and other PII.
4. Either websites do not encrypt PII or encrypt with outdated technology.
5. Passwords should be very strong and should be changed frequently.
6. Your competitor will always have an eyes on you.

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# A study on an impact of Goods and Service Tax (GST) Practices in India

Dr. Ajayraj M Vyas & Ms. Lata S Ved,

## Abstract:

*At present the Goods and Service Tax (GST) is the one of the giant and substantial Indirect tax reforms since independence of India i.e. 1947. The main purpose of GST implementation in India is replace existing tax like, value added tax, excise duty, service tax, sales tax luxury tax and surcharges etc. and enhance economic growth of the country. More than 160 countries are implementing GST so far. However, the idea of GST in India was mooted by Vajpayee government in 2000. It will be very interesting to understand why this proposed GST regime was hump the growth and development of the country. While in India the Indirect tax lived on manufacturer of sale and consumption of Goods and Services. Which has directly impact 2% (approximate) on increase GDP rate.*

*After the implementation of GST in India it would be worthwhile to assess its positive impact on the various areas like, Manufacturing Industry, Poverty reduction, Agriculture, Employment, Price Level, Exim tread, GDP, MSME, AND Government Revenue etc.*

**Keywords:** GST, Indirect Tax, GDP, Economic Growth

## Introduction

The concept of Goods and Service Tax (GST) in India is very wide as it comes from the word 'taxare' which means estimate and make India one unified common Market. The GST is a value-added Indirect tax at each stage of the supply of goods and services specially on value addition achieved. Its purpose to eliminate the inefficiencies in the tax system that result in 'tax on tax' known as cascading of taxes. It means GST is a destination based tax on consumption, as per which the state's share on taxes on inter state commerce goes to the one that is home to the final consumer, rather than the exporting state. So it has two equal components of central and state GST.

The GST is a tax which imposed on the trading of goods, manufacturing, and the usage of the goods and services at the national level. It is the single tax that is imposed on goods and services right from the manufacturer to supplier. It is the tax which is the charged on national and the state level at the similar rates of the similar products and it also imposed separately by the center and the states. So, it can be said that GST is destination based tax which means that 'tax is paid at the place of the supply.

**Genesis of GST:** In Genesis of GST is divided in to the two perspective that are,

Table: 1 Genesis of GST at Global Perspective:

France was the first country to implement GST in 1954. At present, more than 160 countries have implemented it. The reason of introduction of GST is that, The Governments revenue base and achieving balance between direct and Indirect/ Consumption tax are often cited.

Table: 2 Genesis of GST at Indian Perspective:

<b>Kelkar Task force in 2004</b>	16/07/2004	Dr. Kelkar Task Force recommended the need of a national GST.
<b>GST proposed in 2007-08</b>	28/02/2014	<b>Budget speech 2007-08:</b> Union Finance Minister moots the idea of GST from April, 2010.
<b>GST revival in 2014 constitution Amendment Bill</b>	19/12/2014	<b>Constitutional (122<sup>nd</sup> Amendment) Bill, 2014</b> in Lok Sabha
	06/05/2014	<b>Constitutional (122<sup>nd</sup> Amendment) Bill, 2014</b> passed in Lok Sabha
	03/ 08/ 2016	<b>Constitutional (122<sup>nd</sup> Amendment) Bill, 2014</b> Passed in Rajya Sabha
	08/09/2016	Subsequent to ratification of bill by more than 50% of the states, <b>Constitutional (122<sup>nd</sup> Amendment) Bill, 2014</b> received the assent of President of India. It becomes Constitution (101 <sup>st</sup> Amendment) Act, 2016 which paved the way of GST in India.
<b>Central GST Act</b>	27/03/2016	<b>Central GST Legislations Introduced</b> in Lok-Sabha – CGST Bill, 2017, IGST Bill,2017, UTGST Bill, 2017, GST (Compensation to states) Bill, 2017 introduced.
	29/03/2016	<b>Central GST Legislations passed</b> in Lok-Sabha- CGST, 2017, Bill, IGST Bill,2017, UTGST Bill,2017, GST (Compensation to states) Bill, 2017, passed.
	12/04/2017	<b>Central GST Legislations received assent of president and Bills enacted-</b> CGST, 2017, Bill, IGST Bill,2017, UTGST Bill,2017, GST (Compensation to states) Act, 2017.
<b>State GST Act</b>	Diff. Dates	Enactment of the Central Act was followed by the enactment of the state GST laws by Various state legislature.
<b>Roll out from 1<sup>st</sup> July, 2017</b>	01/07/2017	GST has been implemented across the India w. e. f. 1 <sup>st</sup> July,2017.
	08/07/2017	GST in Jammu and Kashmir come in to force w. e. f. 8 <sup>th</sup> July,2017.

**Literature Review:**

- Yadav Alpna (2017)** conducted a study on “Impact of Goods and Services Tax on Indian Economy” and concluded that GST has given to India a world class tax system by grabbing different treatment to manufacturing and service sector. She also found that GST will provide relief to producers and consumers by providing wide and comprehensive coverage of input tax credit set off. Service tax set off and subsuming the several taxes. So, India’s Economic Development and improvement of tax collection are boost through the GDP.
- Singh Sarbjit (2017)** has written a paper on “GST (Goods and service Tax) – A Game changer for India” The researcher concluded that Implementation of GDP is great relief to producers and consumers

by providing more comprehensive tax coverage of input tax and in long run it can act as catalyst for growth of manufacturing industries in India.

- Lourdunathan F. and Xavier P. (2017)** written a paper on “A study on implementation of goods and services tax (GST) in India: prospectus and Challenges” The research concluded that GST need one Nation and One tax market. While efficient formulation of GST will lead to resource and revenue gain for both central and state majorities through widening of tax base and improvement in tax compliance and have positive impact on various sector. It can be further concluded that GST have positive impact on various sectors and industries.
- Khurana Akansha and Sharma Aastha (2016)** have written a research article

on “Goods and Service Tax in India- A positive reform for indirect test system” found that GST will provide relief to producer and Consumer by providing wide and comprehensive coverage of different input taxes. It can be say that GST have positive impact on various sectors and Industries and need to more focused on implementing efforts of all namely, Central and State Government, Trade and Industry.

5. **Dani Shefali (2016)** has Written a research paper on “An Impact of Goods and Service Tax (GST) on Indian Economy.” The research concluded that the proposed GST regime is a halfhearted attempt to rationalize Indirect Tax structure. The researcher found that Government of India should study the GST regime set up by various countries and also their fallouts before implementation it. At the same time Government should make an attempt insulate the vast poor population of India against the likely inflation due to implementation to it.

**Research Methodology**

The Research is based on exploratory research technique based on the past reviews of respective journals, Annual reports, News Paper, Articles, Academic literature of GST, and various websites etc. According to the objectives of the study, the research study is descriptive in nature. The study is based on secondary data was extensively used for the study.

**Objectives of the study**

1. To collect and analysis of current information of Tax structure (GST) in India.
2. To know the benefits of Goods and Service Tax in Indian Context.
3. To know Genesis of GST for Global and Indian perspective.
4. To know how GST works in India.

5. To study the concept of Goods and Services Tax (GST) practices in India.
6. To study the Impact of Goods and Service Tax (GST) in Indian Context.

**Objectives of the Goods and Service Tax:**

GST is proposed to fulfill following objectives:

- 
- 1. Optimum use of efficiency and system of equity.
- 2. The Indian Market should be integrated into single common Market.
- 3. Ensuring the availability of input credit across the value chain.
- 4. Ensuring cascading effect of tax on tax can be eliminated to multiplicity of Indirect taxation and streamline to it.
- 5. Reducing the unhealthy competition among the various states due to the taxes and revenues.
- 6. Reducing Economic distortion.
- 7. Application of Consumption based tax instead of Manufacturing.

**Result and Discussion:**

It would be say that impact of GST on various development areas affected viz, Government revenue, Manufacturing Industry, Poverty reduction, Housing, Employment, Price level, EXIM trade, GDP, Agriculture etc. So the GST is the subsume of all taxes like,

Table: 3 Taxes At The Center And State Level Are Being Subsumed In to GST

Sr. No.	At the Center Level	At the state Level
1.	Central Ex-cise Duty	State VAT/Sales Tax
2.	Central Sales Tax	Purchase Tax
3.	Surcharges and Cesses	Surcharges and Cesses
4.	Customs Duty	Taxes on lottery, betting & gambling
5.	-	Luxury Tax
6.	-	Entertainment Tax (other than those levied by local bodies)



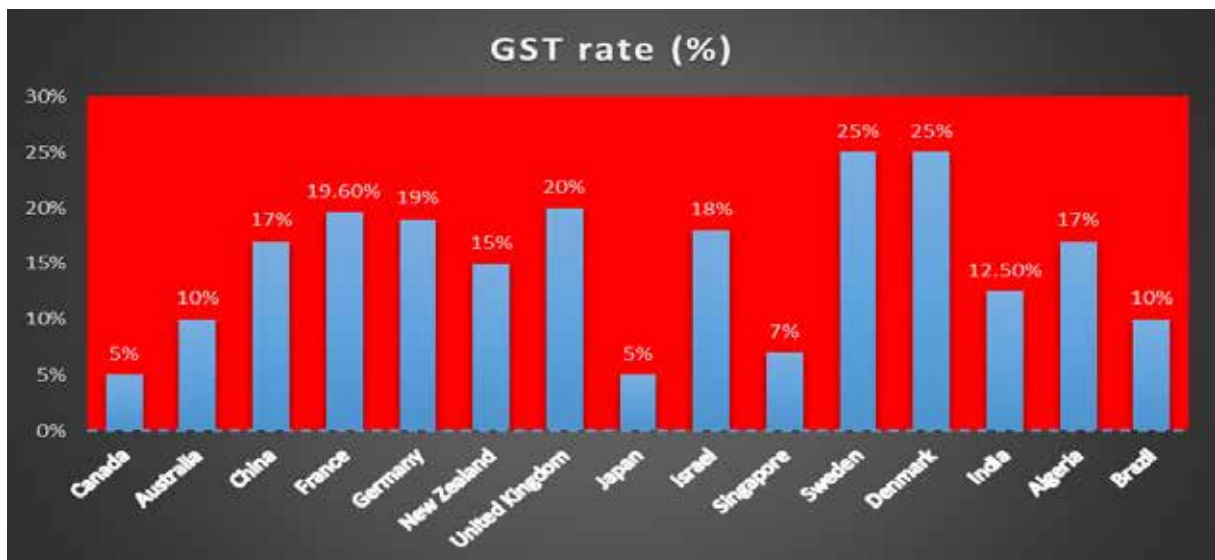
The above table shows the federal structure of India, in which two components of GST (Central level and State Level) simultaneously levy GST across the value chain. For all transaction of Central Level (CGST) and State Level (SGST) are levy taxes in all stages of supply of Goods and Services. The input tax credit of CGST would be available for discharging the CGST liability on the output at each stage. Similarly, the credit of SGST paid on inputs would be allowed for paying the SGST on output. No cross utilization of credit would be permitted.

Table:4 List of some different countries implementing GST rate Appendix

Sr. No.	Country	GST rate (%)	Year of implementation
1.	Canada	5%	1991

2.	Australia	10%	2000
3.	China	17%	1994
4.	France	19.6%	1954
5.	Germany	19%	1968
6.	New Zealand	15%	1986
7.	United Kingdom	20%	1973
8.	Japan	5%	1989
9.	Israel	18%	1976
10.	Singapore	7%	1993
11.	Sweden	25%	1969
12.	Denmark	25%	1967
13.	India	12.5%	2005
14.	Algeria	17%	1992
15.	Brazil	10%	1964

Graph: GST rate



The above chart shows list of some different countries Implementing GST and its rate. World over 160 countries there is GST or VAT. Under the Goods and Service Tax scheme, no distinction is made between paying tax on Goods and Services. It means that GST

is apply to different countries at same rate of tax. Here the India is planning tax rate at 5%, 12% and 18% which is the directly connect the revenue of the government. Which is very positive reform for the Indirect tax system in India.













Table:5 States in India Who confirm of SGST Act Passed in the Assembly

Sr. No.	Name of the State	Act Passed On	Sr. No.	Name of the State	Act Passed On
1.	Telangana	9 <sup>th</sup> April, 2017	17.	Maharashtra	22 <sup>nd</sup> May, 2017
2.	Bihar	24 <sup>th</sup> April,2017	18.	Tripura	25 <sup>th</sup> May, 2017
3.	Rajasthan	26 <sup>th</sup> April,2017	19.	Sikkim	25 <sup>th</sup> May, 2017
4	Jharkhand	27 <sup>th</sup> April,2017	20.	Mizoram	25 <sup>th</sup> May, 2017
5	Chhattisgarh	28 <sup>th</sup> April,2017	21.	Nagaland	27 <sup>th</sup> May, 2017
6.	Uttarakhand	2 <sup>nd</sup> May, 2017	22.	Himachal Pradesh	27 <sup>th</sup> May, 2017
7.	Madhya Pradesh	3 <sup>rd</sup> May, 2017	23.	Delhi	31 <sup>st</sup> May, 2017
8.	Haryana	4 <sup>th</sup> May, 2017	24.	Manipur	5 <sup>th</sup> June, 2017
9.	Goa	9 <sup>th</sup> May, 2017	25.	Meghalaya	12 <sup>th</sup> June, 2017
10.	Gujarat	9 <sup>th</sup> May, 2017	26.	Karnataka	15 <sup>th</sup> June, 2017
11.	Assam	11 <sup>th</sup> May, 2017	27.	West Bengal	15 <sup>th</sup> June, 2017
12.	Arunachal Pradesh	12 <sup>th</sup> May, 2017	28.	Punjab	19 <sup>th</sup> June, 2017
13.	Andhra Pradesh	16 <sup>th</sup> May, 2017	29.	Tamil Nadu	19 <sup>th</sup> June, 2017
14.	Uttar Pradesh	16 <sup>th</sup> May, 2017	30.	Kerala	21 <sup>st</sup> June, 2017
15.	Puducherry	17 <sup>th</sup> May, 2017	31.	Jammu & Kashmir	Yet to Pass
16.	Odisha	19 <sup>th</sup> May, 2017			

The above table shows List of States in India Who confirm of SGST Act Passed in the Assembly by doing so it will bring harmonization of taxation system in India.

**Benefits of GST:**

Table: 6 The classification of benefits of GST in India

(A) Benefits to Central /State Government:	<ul style="list-style-type: none"> <li> Unified Common national market</li> <li> Boost to export/make in India</li> <li> Increase in revenue</li> </ul>
(B) Benefits to Trade:	<ul style="list-style-type: none"> <li> Reduction in multiplicity of taxes</li> <li> Mitigation of cascading effects</li> <li> Mitigation of double taxation</li> <li> Simple tax regime</li> <li> Fewer rates</li> <li> Fewer exemptions</li> </ul>
(C) Benefits to consumer:	<ul style="list-style-type: none"> <li> Simple tax system</li> <li> Reduction in price of goods due to elimination of cascading effects</li> <li> Uniform prices throughout the country</li> </ul>

**Impact of GST on Indian Economy**

Amidst economic crises across the globe, India has posed a beacon of hope with ambitious growth targets, supported by a bunch of strategies undertaken such as the Make in India and Digital India campaigns. In another way the GST is undertaking what it expected to provide the much required stimulant for the growth of economy which is transforming the existing base of Indirect taxation towards the free flow of Goods and Services. Here the GST also expected to eliminate the cascading effect of taxes. For the further years come India projected to play an important role in the world economy. The expectations of Goods and Services Tax being introduced in high not only within the country, but also within the neighbor country and developed economies of the world. Last but not least, the GST, because of its transparent character, will be easier to administer. Once it is implemented, the proposed taxation system holds great promise in terms of sustaining growth for Indian economy.

### **Impact of Goods and Service Tax at different sector:**

GST would be beneficiary for the sectors like given below,

Fast moving consumer goods sector:

FMCG sector in India is the fastest major contributor sector in both Direct and indirect Taxes in the Economy. The present rate of Taxation in FMCG sector is around 22% to 25% and after the GST rate is expected to be much lower which will result in reduction of prices of consumer goods.

### **Real Estate Industry:**

The impact of GST on real estate sector will effect primarily. In which the classification of Goods and Services is very important under this sector because it is necessary to divide or classify the things which will cover under the area of GST and which are not. Like sale and transfer of immovable property are not included in GST. So, the procurement of material of construction is falling under the

GST.

### **Food Industry:**

The consumer's expenses on food is larger in case of the poor income family or not. If there is Tax on it will influence majority of Populations or may be regressive in nature. In some countries like Australia, Canada, UK and Japan tax on food are negligible. So, if the GST rates will be lower than it would be possible to affect people significantly.

### **Information Technology enable services:**

The expected rate of GST on Information Technology Sector is 27% according to proposed plan. It includes the tax of Software transfer through electronic would be included over here because IT industry will make Mix taxation.

### **Textile Industry:**

It was found that the expected rate of GST in Textile industry is higher as per the current rate of tax. The Textile industry may be beneficial from the GST as manufacturing costs, may be reduced due to the subsume of various taxes like entry tax, Octroy, Luxury Tax etc. In every situation the GST is supporting to industry in long run. Where in presently cotton and wool fiber are currently exempted from the GST.

### **Pharma Industry:**

In India Pharmaceutical Industry is in 3<sup>rd</sup> Rank in case of largest production of Generic Medicines in World wide. The implementation of GST in this sector is constructive impact on Healthcare industry particularly Pharma. The merger of 8 different types of taxes (after sorting out of taxation) enforced on Pharmaceutical Industry today. The merger of all taxes in one uniform tax will ease the way of doing business. This tax also improves the transportation and supply chain of pharmaceutical products.

### **Service Sector:**

Service sector of India is consisting 60% of the GDP. The rate of GST for service sector are expected to be 18% to 20% Which is Higher than the present rate of tax i.e. 15%. So the result will increase Service cost for services like Telecom, Banking, and Insurance.

**Agriculture sector:**

Under the single rate of tax, the GST on agricultural sector will have positive impact as all the taxes are subsumed under a single rate of tax. So. the movement of agricultural commodities between states is become easier and hassle free which will save time and remove wastage for the transportation of perishable items.

**Transportation Industry:**

For the cross state transportation, the GST found very efficient. As it will count the logistic cost, reduced times for transportation. Presently 29 countries are taking tax at different rates on good and services for moving across the state borders that's why the tax on transportation is collected so many times as result there is long delays at different interstate checkpoints for reviewing by state authorities who checks for the application of relevant taxes and other levies. This is the reason for delays for an average 6 to 7 hours of transportation. GST would replace around 15 state and federal taxes and tariffs for a single tax at the point of sale of goods.

**Infrastructural Sector:**

With developments facilities like Roads, Railways, Power and Ports etc. are becomes major Infrastructural sectors in India. As the

GST system in this sector is very complex. The different kinds of exemptions and subsidies are available to this sector as it affects very important for the development of the country. By the implementation of GST, the complex tax will be removed and would increase tax base.

**Conclusion:**

In India Taxation system is very beneficial as well as important because from the above discussion it can be conclude that GST will provide relief from widen followed by different country and state by different way of method. Here GST will provide relief to Producers and consumers by providing wide and comprehensive coverage of input tax -credit set off and subsuming the several taxes. Efficient and effective formation of GST will lead to gain (resource and revenue) to the central and states most probably to widening of tax base and improvement in the tax compliance. It can be further conclude that by analyzing impact of different countries GST rate it will be beneficial for implementation to different stock holders, trade and different industry in India. Thus required steps should be taken.

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# Partial Decompilation and increasing code re-usability of byte code with the help of reflection in Java

Jay Nanavati

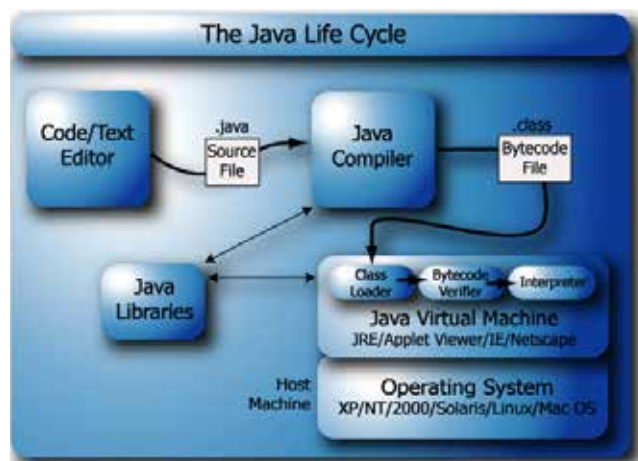
## Abstract:

*Java programs are platform-independent. This feature is attributed to the fact that when a Java program is compiled, the Java compiler converts it into bytecode and not executable code. Bytecode is a set of machine-instructions for a hypothetical computer, known as Java Virtual Machine (JVM). Java programs are platform-independent. This feature is attributed to the fact that when a Java program is compiled, the Java compiler converts it into bytecode and not executable code. Bytecode is a set of machine-instructions for a hypothetical computer, known as Java Virtual Machine (JVM). Code-reusability is achieved using the bytecode i.e. the available class file directly or with the help of inheritance. A heuristic algorithm is proposed to apply reflection on the bytecode to partially decompile the same. Further, code maneuver techniques are proposed to alter the restrictive access specifiers on the members of the class.*

## Introduction

Java, since its first version was released in 1994, has been one of the most sought-after programming language across the world. Platform-independence, support for object-oriented programming, security, simplicity, extensibility and multithreading are the salient features which are responsible behind success and survival of Java.

Java programs are platform-independent. This feature is attributed to the fact that when a Java program is compiled, the Java compiler converts it into bytecode and not executable code. Bytecode is a set of machine-instructions for a hypothetical computer, known as Java Virtual Machine (JVM). JVM converts the bytecode to the machine language that is understood by the system. Thus the same source code can be run on multiple platform. All you need is the .class file and the JVM for that specific machine. Machine code depends on the CPU however the instruction set of JVM can be executed on many CPUs. This makes Java Platform Independent. These JVMs interpret the bytecode semantically the same way, but the actual implementation may be different.



The Java Life Cycle

## Decompilation

Decompilation is a Program Transformation by which a high-level source code for an executable program is discovered. Decompilation is the inverse of Program Compilation.

## Reflection

Reflection is the process of examining or modifying the run time behavior of a class at run time. Reflection can be used to get information about:

Class: The getClass() method is used to get the name of the class to which an object belongs.

Constructors: The getConstructors() method is used to get the public constructors of the class to which an object belongs.

Methods: The getMethods() method is used to get the public methods of the class to which an objects belongs.

### Advantages of Reflection

Extensibility Features: An application may make use of external, user-defined classes by creating instances of extensibility objects using their fully-qualified names.

Debugging and testing tools: Debuggers use the property of reflection to examine private members on classes.

### Disadvantages of Reflection

Performance Overhead: Reflective operations have slower performance than their non-reflective counterparts, and should be avoided in sections of code which are called frequently in performance-sensitive applications.

Exposure of Internals: Reflective code breaks abstractions and therefore may change behavior with upgrades of the platform.

## Code Re-usability in Java

Code-reusability is achieved in one of the following two ways:

1. using the bytecode i.e. the available class file directly.
2. with the help of inheritance.

### Challenges involved in Code re-usability

However, the following challenges are involved in these two approaches:

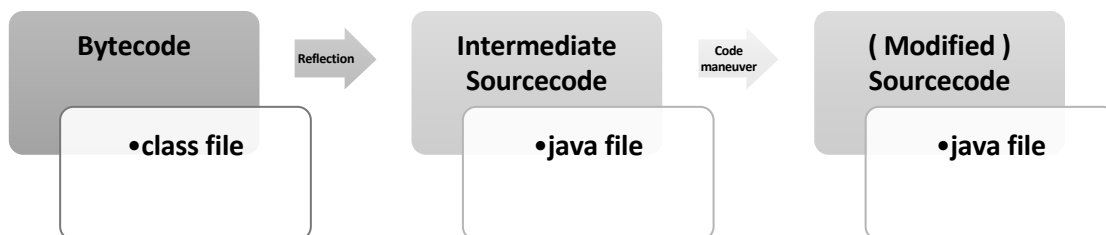
1. A class which is declared as final, can not be inherited.
2. Members of the class which have private access, can not be inherited.
3. Any attempt to invoke a method which has private access in the original class, in reflected class results into IllegalAccessException.

A solution to meet the challenges described above, is proposed in this paper.

A heuristic algorithm is proposed to apply reflection on the bytecode to partially decompile the same. Further, code maneuver techniques are proposed to alter the restrictive access specifiers on the members of the class. The step-by-step procedure to implement the proposed approach, is discussed next.

### **The step-by-step procedure**

**Step-1** Copy the bytecode (i.e. the class file) which is to be decompiled, into the same package directory wherein the decompilation code is available.



The Proposed Approach

**Step-2** Define a static method to convert integer representation of modifiers into their String equivalent.

**Step-3** Instantiate the class to be decompiled.

**Step-4** Get Class object corresponding to the class under study.

**Step-5** Get name of superclass and interfaces implemented by the class. Use this information to generate first line of class definition. This line must clearly mention extends followed by superclass and implements followed by name of interface(s). Write the generated code to the file.

In case the, class is declared as final, remove this modifier to enable inheritance.

**Step-6** Get details of the fields i.e. attributes of the class with the help of getDeclaredFields() method. Modify the results and format the arguments list and method body. Write them to the destination file.

In case the, attribute is declared as private, replace it with either default or some other liberal access specifier.

**Step-7** Get constructor details with the help of getConstructors() method. Modify the results and format the arguments list and constructor body. Write them to the destination file.

**Step-8** Get method details with the help of geMethods() method. Modify the results and format the arguments list and method body. Write them to the destination file.

In case the, method is declared as private, replace it with either default or some other liberal access specifier.

**Step-9** Review the code in destination file for any discrepancy and rectify it.

**Step-10** Compile and the reuse the code.

### The Working Example

The proposed approach is validated with the help of a typical class and corresponding bytecode.

The code snippet for the class is given below:

```
// Point.java
import java.io.*;
public final class Point implements Serializable
```

```
{
    private int x,y;
    public static final int k=100;
    public static final float PI=3.14F;
    public static final boolean isOK=true;
    private Point end;
    public Point()
    {
        x=-1;
        y=-1;
    }
    public Point(int x,int y)
    {
        this.x=x;
        this.y=y;
    }
    public void sum()
    {
        System.out.println(x+y);
    }
}
```

### // UsePoint.java – The Partial Decompiler

```
import java.lang.reflect.*;
import java.io.*;
class UsePoint
{
    public static String getModifiers(int code)
    {
        String access="";
        switch(code)
        {
            case 0: access=" "; break;
            case 1: access="public"; break;
            case 2: access="private"; break;
            case 4: access="protected"; break;
            case 16: access="final"; break;
            case 25: access="public static final"; break;
            case 1024: access="abstract"; break;
        }
        return access;
    }
    public static void main(String args[])
    throws IllegalArgumentException,IllegalAccess-
    Exception
    {
        Point p1 = new Point();
        String newline="\r\n";
```



```
String classname = p1.getClass().get-
Name()+"_REVISED";
String baseclassname = p1.getClass().getSu-
perclass().getName();
String filename = classname+".java";
String path = "F:\\Research Paper Contest\\";
File file = new File(path+filename);
try
{
FileWriter fw;
if(file.exists())
{
fw = new FileWriter(file);
}
else
{
file.createNewFile();
fw = new FileWriter(file);
}
System.out.println("Class name -
"+classname);
fw.write("class "+classname);
fw.write(" extends "+baseclassname);
Class[] interfaces = p1.getClass().getInterfac-
es();
if(interfaces.length!=0)
{
fw.write(" implements ");
for(Class i : interfaces)
{
fw.write(i.getName());
}
}
fw.write(newline);
fw.write("{");
fw.write(newline);
Object val=null;
// Code to add field declarations
Field fields[] = p1.getClass().getDeclared-
Fields();
for(Field f : fields)
{
Class t = f.getType();
String datatype=t.getName();
int mod = f.getModifiers();
String access= getModifiers(mod);
fw.write(access+" "+datatype+" "+f.get-
```

```
Name());
if(mod==25)
fw.write(" = "+f.get(val).toString());
if(datatype.equals("float"))
fw.write("F");
if(datatype.equals("long"))
fw.write("L");
fw.write(";");
fw.write(newline);
}
System.out.println("Constructor(s) ...");
fw.write(newline+newline+"//Construc-
tor(s)" +newline);
Constructor constructors[] = p1.getClass().
getDeclaredConstructors();
for(Constructor c : constructors)
{
String access= getModifiers(c.getModifi-
ers());
System.out.print(access+" "+c.get-
Name()+"(");
fw.write(access+" "+classname+"(");
Class paramTypes[] = c.getParameterTypes();
int count=1;
for(Class pType : paramTypes)
{
System.out.print(pType.getName());
fw.write(pType.getName());
if(count++ < paramTypes.length)
{
System.out.print(",");
fw.write(",");
}
}
System.out.println(")");
fw.write(")");
fw.write(newline+"{" +newline);
fw.write("new "+c.getName()+"()");
fw.write(newline+"}" +newline);
}
System.out.println("Interface(s) implemented
...");
interfaces = p1.getClass().getInterfaces();
for(Class i : interfaces)
System.out.println(i.getName());
System.out.println("Field(s)...");
fields = p1.getClass().getDeclaredFields();
```

```
//Field fields[] = p1.getClass().getFields();
for(Field f : fields)
{
Class t = f.getType();
System.out.println(f.getName()+" "+t.get-
Name()+f.getModifiers());
}
/* getDeclaredFields() returns fields declared
in that class whereas
getFields() returns inherited fields too.*/
System.out.println("Method(s)...");
//Method methods[] =p1.getClass().getDe-
claredMethods();
Method methods[] =p1.getClass().getMeth-
ods();
for(Method m : methods)
System.out.println(m.getName());
fw.close();
}
catch(IOException ioe)
{
System.out.println(ioe);
}
}
}
```

### Output

```
//Point_REVISED.java
class Point_REVISED extends java.lang.
Object implements java.io.Serializable
{
private int x;
private int y;
public static final int k = 100;
public static final float PI = 3.14F;
public static final boolean isOK = true;
private Point end;
//Constructor(s)
public Point_REVISED()
{
Object obj1 = new Point();
}
public Point_REVISED(int x,int y)
{
new Point();
}
}
```

### Conclusion

A class declared as final can not be inherited where members of a class declared as private can not be inherited. Further, if only the bytecode is available, it becomes quite difficult to understand the implementation details and concrete functionality of class and its constituent parts. However, applying a well-thought reflection on such a class results into recovery of good quality source code. This intermediate source code can be made more usable by code maneuvering, especially using weaker access specifiers.

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## Accounts and Audit under GST

**Dr. Sanjay Radadiya**

### Abstract:

*Goods and Service Tax (GST) is structured for efficient tax collection, reduction in corruption, easy inter-state movement of goods and a lot more.*

*The next challenge before you after implementation of GST is maintenance of proper accounts and records under the Act. It is pertinent to mention that, without proper maintenance of accounts and records, the taxable person may find several difficulties in filling periodical returns under the Act. Moreover, non-compliance on the part of registered person may eventually result in demand notice.*

*The maintenance of "Accounts and Records" is specifically covered under Chapter VIII, Section 35 & 36 of CGST ACT, 2017 and Rule 56 to 58 of CGST Rules, 2017 made there under.*

*Audit under GST is the examination of records maintained by a registered dealer. The aim is to verify the correctness of information declared, taxes paid and to assess the compliance with GST.*

*The GST Law provides for self-assessment to facilitate easy compliance and payment of taxes. It also explains the notices, the demand and recovery provisions when the taxes are unpaid, short paid and/or returns are not filed.*

*Audit under GST is the examination of records maintained by the taxable person to verify the correctness of information declared, taxes paid and to assess the compliance with the provisions of GST.*

**Key Words** -Provisions to maintain books of account under GST  
-Provisions for Audit under GST

### Introduction:

GST is a trust based taxation regime wherein the taxpayer is himself required to self assess his tax liability and himself pay the same without any intervention by the tax officials. To ensure that there are no mis-appropriations in the self-assessed GST Returns, the govt has put in a place a robust audit mechanism to measure and ensure compliance of the provisions of the GST law by the taxpayer.

### Accounts & Records to Be Maintained Under GST (Sec. 35, 36 & Rules 56 to 58 of CGST Act)

Sec. 35 (1) - Every registered person shall keep and maintain at his Principle Place of Business, true and correct account of:

- Production or manufacture of goods;
- Inward and outward of goods or services or both;
- Stock of goods; Input tax credit availed;
- Output tax payable and paid; and
- Such other particulars as be prescribed

In case of multiple place of business, such related accounts records or accounts are to be kept and maintained at such place of business.

These accounts and records may also be kept and maintained in electronic form as per the manner prescribed.

As per sec. 35(3) -The commissioner may also notify additional accounts or documents to be maintained by such specified class of taxable persons.

As per sec. 35(4) –The commissioner may also relax the provisions of keeping and maintaining accounts and records in respect of any class of taxable persons if he feels that such class of persons are not in position to keep and maintain accounts and records as per the requirements of this section.

As per sec. 35(5) - Every registered person whose

aggregate turnover during a financial year exceeds two crore rupees shall get his accounts audited and he shall furnish a copy of audited annual accounts and a reconciliation statement, duly certified, in FORM GSTR-9C. (Rule 80(3)).

As per sec. 35(6) - Where registered person fails to account for the goods or services or both in accordance with section 35(1), the PO shall determine the amount of tax payable on the goods or service not accounted for, as if such goods or services have been supplied by him and penalty provisions of section 73 & 74 shall apply accordingly.

### Period for Retention:

As per sec. 36 - Every registered taxable person required to keep and maintain books of account or other records will maintain the books for at least 72 months, counted from the last date of filing of Annual Return.

In case of appeal or revision or any other proceedings or investigation, such records shall be retained for a period of 1 year after disposal of such appeal or revision or proceedings or investigation or for the period as specified above.

### Accounts and Records Rules:

As per Rule 56. Maintenance of accounts by registered persons.-

1. Every registered person shall keep and maintain, in addition to the particulars mentioned in sub-section (1) of section 35, a true and correct account of the: goods or services imported or exported, supplies attracting payment of tax on reverse charge along with the relevant documents, including invoices, bill of supply, delivery challans, credit notes, debit notes, receipt vouchers, payment vouchers and refund vouchers.
2. Every registered person, other than Composition dealer, shall maintain the accounts of stock in respect of: goods received and supplied by him, and such

accounts shall contain particulars of the opening balance, receipt, supply, goods lost, stolen, destroyed, written off or disposed of by way of gift or free sample and the balance of stock including raw materials, finished goods, scrap and wastage thereof.

3. Every registered person shall keep and maintain a separate account of advances received, paid and adjustments made thereto.
4. Every registered person, other than Composition dealer, shall keep and maintain : an account containing the details of tax payable (including tax payable under RCM), tax collected and paid, input tax, input tax credit claimed, and a register of tax invoice, credit notes, debit notes, delivery challan issued or received during any tax period.
5. Every registered person shall keep the particulars of - (a ) names and complete addresses of suppliers from whom he has received the goods or services chargeable to tax under the Act; (b) names and complete addresses of the persons to whom he has supplied goods or services, where required under the provisions of this Chapter; (c) the complete address of the premises where goods are stored by him, including goods stored during transit along with the particulars of the stock stored therein.
6. If any taxable goods are found to be stored at any place(s) other than those declared under sub-rule (5) without the cover of any valid documents, the proper officer shall determine the amount of tax payable on such goods as if such goods have been supplied by the registered person.
7. Every registered person shall keep the books of account at the principal place of business and books of account relating to additional place of business mentioned in his certificate of registration and such books of account shall include any

- electronic form of data stored on any electronic device.
8. Any entry in registers, accounts and documents shall not be erased, effaced or overwritten, and all incorrect entries, otherwise than those of clerical nature, shall be scored out under attestation and thereafter, the correct entry shall be recorded and where the registers and other documents are maintained electronically, a log of every entry edited or deleted shall be maintained.
  9. Each volume of books of account maintained manually by the registered person shall be serially numbered.
  10. Unless proved otherwise, if any documents, registers, or any books of account belonging to a registered person are found at any premises other than those mentioned in the certificate of registration, they shall be presumed to be maintained by the said registered person.
  11. Every agent shall maintain accounts showing the: (a) particulars of authorization received by him from each principal to receive or supply goods or services on behalf of such principal separately; (b) particulars including description, value and quantity (wherever applicable) of goods or services received on behalf of every principal; (c) particulars including description, value and quantity (wherever applicable) of goods or services supplied on behalf of every principal; (d) details of accounts furnished to every principal; and (e) tax paid on receipts or on supply of goods or services effected on behalf of every principal.
  12. Every registered person manufacturing goods shall maintain monthly production accounts showing quantitative details of: raw materials or services used in the manufacture and the goods so manufactured including the waste and by products thereof.
  13. Every registered person supplying services shall maintain the accounts showing quantitative details of: goods used in the provision of services, details of input services utilized and the services supplied.
  14. Every registered person executing works contract shall keep separate accounts for works contract showing - (a) the names and addresses of the persons on whose behalf the works contract is executed; (b) description, value and quantity (wherever applicable) of goods or services received for the execution of works contract; (c) description, value and quantity (wherever applicable) of goods or services utilized in the execution of works contract; (d) the details of payment received in respect of each works contract; and (e) the names and addresses of suppliers from whom he received goods or services.
  15. The records under the provisions of this Chapter may be maintained in electronic form and the record so maintained shall be authenticated by means of a digital signature.
  16. Accounts maintained by the registered person together with all the invoices, bills of supply, credit and debit notes, and delivery challans relating to stocks, deliveries, inward supply and outward supply shall be preserved for the period as provided in section 36 and shall, where such accounts and documents are maintained manually, be kept at every related place of business mentioned in the certificate of registration and shall be accessible at every related place of business where such accounts and documents are maintained digitally.
  17. Any person having custody over the goods in the capacity of a carrier or a clearing and forwarding agent for delivery or dispatch thereof to a recipient on behalf of any registered person shall maintain true and correct records in respect of such goods handled by him on behalf of such registered person and shall produce the

details thereof as and when required by the proper officer.

18. Every registered person shall, on demand, produce the books of accounts which he is required to maintain under any law for the time being in force. Rule 57.

### **Generation and maintenance of electronic records.-**

1. Proper electronic back-up of records shall be maintained and preserved in such manner that, in the event of destruction of such records due to accidents or natural causes, the information can be restored within a reasonable period of time.
2. The registered person maintaining electronic records shall produce, on demand, the relevant records or documents, duly authenticated by him, in hard copy or in any electronically readable format.
3. Where the accounts and records are stored electronically by any registered person, he shall, on demand, provide the details of such files, passwords of such files and explanation for codes used, where necessary, for access and any other information which is required for such access along with a sample copy in print form of the information stored in such files.

### **Audit under GST:**

Audit under GST is the process of examination of records, returns and other documents maintained by a taxable person. The purpose is to verify the correctness of turnover declared, taxes paid, refund claimed and input tax credit availed, and to assess the compliance with the provisions of GST.

### **Threshold for Audit**

Every registered taxable person whose turnover during a financial year exceeds the prescribed limit [as per the latest GST Rules, the turnover limit is above Rs 1 crore] shall get his accounts audited by a chartered accountant

or a cost accountant. He shall electronically file:

1. an annual return using the Form GSTR 9B along with the reconciliation statement by 31st December of the next Financial Year,
2. the audited copy of the annual accounts,
3. a reconciliation statement, reconciling the value of supplies declared in the return with the audited annual financial statement, and
4. other particulars as prescribed.

If any taxable person, after furnishing a return discovers any omission/incorrect details (from results of audit), he can rectify **subject to payment of interest**. However, no rectification will be allowed after the due date for filing of return for the month of September or second quarter, (as the case may be), following the end of the financial year, or the actual date of filing of the relevant annual return, whichever is earlier.

### **Audit by Tax Authorities**

The Commissioner of CGST/SGST (or any officer authorized by him) may conduct audit of a taxpayer. The frequency and manner of audit will be prescribed later.

A notice will be sent to the auditee at least 15 days before.

The audit will be completed within 3 months from date of commencement of the audit.

The Commissioner can extend the audit period for a further six months with reasons recorded in writing.

### **Obligations of the Auditee**

The taxable person will be required to:

- provide the necessary facility to verify the books of account/other documents as required
- to give information and assistance for timely completion of the audit.

### **Findings of Audit**

On conclusion of an audit, the officer will inform the taxable person within 30 days of:

- the findings,
- their reasons, and
- the taxable person's rights and obligations

If the audit results in detection of unpaid/shortpaid tax or wrong refund or wrong input tax credit availed, then demand and recovery actions will be initiated.

### **Special Audit:**

The Assistant Commissioner may initiate special audit, considering the nature and complexity of the case and interest of revenue. If he is of the opinion during any stage of scrutiny/enquiry/investigation that the value has not been correctly declared or the wrong credit has been availed then special audit can be initiated.

Special audit can be conducted even if the tax payers books have already been audited before.

The Assistant Commissioner (with the prior approval of the Commissioner) can order for special audit (in writing). The special audit will be carried out by a chartered accountant or a cost accountant nominated by the Commissioner.

The auditor will have to submit the report within 90 days. This may be further extended by the tax officer for 90 days on an application made by the taxable person or the auditor.

The expenses for examination and audit including the auditor's remuneration will be determined and paid by the Commissioner.

The taxable person will be given an opportunity of being heard in findings of the special audit.

If the audit results in detection of unpaid/

shortpaid tax or wrong refund or input tax credit wrongly availed then demand and recovery actions will be initiated.

Audit under GST is the process of examination of records, returns and other documents maintained by a taxable person. The purpose is to verify the correctness of turnover declared, taxes paid, refund claimed and input tax credit availed, and to assess the compliance with the provisions of GST.

### **Conclusion:**

In India, the tax compliances by most tax payers leave a lot to be desired. Therefore, while the information provided by the tax payer would be accepted at its face value, there have to be certain checks and balances put in place to ensure that no tax leakages take place due to inadequate information of tax laws, negligence in maintaining records, human or technical errors and fraud.

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## Exploration of The Problems Faced by Working Women (A Case of Ahmedabad City)

Dr. Seema G Hariramani

### Abstract:

*Wants and Desires are never ending. Human beings work hard day and night to satisfy their needs and wants. Urge for materialistic life, craze for automatic gadgets, luxurious lifestyle, higher standard of living has made a human work life machines. Single bread earner in the family is not able to satisfy the never ending demands of the children and other family members. This has made a woman come out of the home, work; and be a helping hand to the male members of the family. This study is the result of a curiosity to know what happens to a woman when she comes out of the home, starts to work, earn and be independent in this male dominated society. The purpose of this study is to know what problems a working women has to face in the society; be it at home, at office or at the social gatherings. The study revealed that majority of the working women feel that they have to work harder to receive same benefits as compared to the male employees of their organization and have to perform jobs that are irrelevant to their job skills. Half of the sample respondents face technical problems while working and the other half of the sample feel it's difficult to maintain co-ordination among employees at work.*

**Key Words:** Working Women, Problems, Family, Society.

### Introduction

Wants and Desires are never ending. Human beings work hard day and night to satisfy their needs and wants. Urge for materialistic life, craze for automatic gadgets, luxurious lifestyle, higher standard of living has made a human work life machines. Single bread earner in the family is not able to satisfy the never ending demands of the children and other family members. This has made a woman come out of the home, work; and be a helping hand to the male members of the family. On the other hand movement towards women empowerment has forced women to work, earn and be independent. The ratio of working women has been increasing day by day. The reasons may be many ranging from need to have luxurious life style, higher demands of children, show off in the society, higher standard of living, inflation, education, complex life styles, change in behaviours, effect of western culture, force from the family members and so on. This study is the result of a curiosity to know what happens to a woman when she comes out of the home, starts to work, earn and be independent in this male dominated society. The purpose of this study is to know what problems a working women has to face in the society; be it at home, at office or at the social gatherings. Modern women are different than the old, traditional women. They are capable of managing work life balance. They can handle all the household chores and simultaneously be independent.

### Literature Review

A good research requires an in-depth knowledge of the subject/issue which is important to the study. The available related literature was studied which proved to be very useful in getting an insight into the

main objectives of the study and in finalizing the methodology.

**Varhely, Susan C. (1985)** conducted a study to compare working women, career women, and homemakers on the variables of self-concept, locus of control, and attitudes towards women. The study concluded that career women were found to be significantly more non-traditional in their attitudes than other groups of women. Multiple regression analysis indicated that a combination of education, number of children, and age of youngest child was the best predictor of self-concept. Positive self-concept was related to education and to fewer and older children. **Deborah Anne Magor (2006)** wanted to examine how working women are represented in the news media, and to what extent 'social class' figures in the representations of women in news content. Using language, visual and narrative analysis, four case studies each focusing on portrayals of different women from different socio-economic backgrounds determined by their occupation was taken. The first two case studies examined portrayals of low paid working women through coverage of the National Minimum Wage introduction into Britain in April 1999 and the Council Workers' Strike in England and Wales in 2002. The latter two case studies focused on women in particular professions: elite businesswomen, military women and women war reporters. The study concluded that class was shown to be a determining factor in how women figure in news content. However, these class determinants combined with other news frames pertaining to gender, established myths of femininity when women enter non-feminine work 'spaces' such as business and the military. Class, in the latter case, can tend to slip out of view, as sexist coverage is commonplace and debates are formed about the right and wrong behaviour for women. A study on "Challenges and risks faced by the working women in government organizations: An insight from Asian Countries" by **Huagui Zhu et. al. (2012)** found that female employees face

many difficulties in government organizations, such as discriminatory gender policy, lack of trainings, pick and drop facility, and even in some organizations female employees do not have separate toilets. Almost all organizations did not have day care centre for children of working women, timings are inflexible for female employees and lack of appreciation for their work, internet facilities at work place, lack of basic facilities are the major concerns of working women of Northern areas of Pakistan. **Ashlesha Singh (2013)** conducted semi-structured interviews under a qualitative research design with purposive sample of eight research participants within the sales and credit division at a large banking institution in the Durban region to understand female bank employees' perceptions of work life balance at a banking institution. The findings of the study indicated that these women relied heavily upon domestic helpers in terms of household duties, extended family and their spouses in terms of childcare duties and needs. These employees felt that work dominates their lives more due to the core demands of meeting targets within the sales and credit divisions. These employees perceived that the bank as a whole was not supportive of work life balance as they claimed to be and wanted to be involved with the HR Department in the formation of work-life balance policies. **G.Shiva (2013)** undertook a study to determine the work-life balance and challenges faced by working women. Responses were collected from 200 career women working in Kerala, India. By using various tools like percentage analysis, chi-square and correlation, results showed that there is a work-family conflict and lack of organizational satisfaction among working women. Further long-term exposure of workers to excessive work hours and high levels of work-to-family interference increase the risk of mental and physical health problems. The study provided solutions to the some of the problems like offering employee a choice and flexibility of work hours, proper arrangements, a harmonized organizational

culture, and the appropriate behaviour of managers at all levels. Another study by **Varsha Kumari (2014)** on “Problems and Challenges faced by Urban Working Women in India” revealed some common problems, like mental and physical stress, lack of proper balance between work and family care, unfair treatment at the workplace, stress and work place discrimination etc. the other challenges were age or category specific, like prejudiced and stereotyped thinking, safety and security issues, ego hassles with colleagues, and problem of glass ceiling etc. **Amy Lauren O’ Carroll (2015)** with the objective of focussing on the main challenges for women working in the corporate sector in relation to their career progression and work life balance conducted a survey of 121 females working in the corporate sector. The results indicated that there exists a significant difference for married respondents compared to non-married. The majority of respondents felt they could improve their work life balance and a large portion of respondents noted that their employers could help them to improve their work life balance at work with less workloads, recognition for extra work and hard work, introduce flexi time/flexible working hours. **Rafia Faiz (2015)** with 280 structured questionnaires and 47 in-depth, semi-structured, face-to-face interviews in four different banks in Punjab province of Pakistan tried to find out the experiences of working women in a gendered, patriarchal, Muslim society. The findings of the study suggested a gendered culture of silence in Pakistan in which women working in Pakistani banks lack opportunities to vocalise their subjugated positions in the work and family spheres. The research also revealed that women in Pakistani banks are not passive victims, but active agents, making context dependent constrained choices to prevent or cope with work-family-conflict. For policymakers, the findings suggested the need for the formulation of context-specific initiatives to address work-family issues in patriarchal Muslim societies. Many studies were found on the work life

balance of working women but very few on the problems faced by them in the modern society. Hence this study was undertaken.

**Patricia Ann Bernard (2009)** under the study focused on investigating the stressors of women who currently work in the leadership positions within corporate America, Education, and Government Agencies and the coping strategies used by them to combat stress. A Structured questionnaire containing Likert scale type questions was administered to 67 women at least 20 years old who functioned in leadership positions within Corporate America, Education, and Government. Further face-to-face semi-structured interview was conducted with 6 women leaders - 2 each were from Education, Corporate America, and Government. The findings of the study revealed that women functioning in leadership positions experienced role ambiguity, role boundary, and role overload and vocational strain. Significant relationship was found between stress and length of service. As the length of time with their respective organizations increased, less occupational stress and personal strain were experienced by these women. Prayer and spirituality were identified to combat stress.

### **Research Methodology**

Research Methodology suggests how the research work is undertaken. Research Objectives, Research Design, Sampling Decisions, Contact Method and Data Analysis are the elements of Research Methodology.

### **Research Objectives**

Aspiration for high standard of living, downsizing economies, inflationary trends have left no choice for women but to work. The following objectives were established for the study:

To know the present situation of the working Women.

To study the problems faced by working Women at work place.

To study the problems faced by working Women at home.

### Research Design, Scope of Study, Sampling Design and Data Collection

A survey of 100 working women was undertaken on the basis of judgemental sampling technique. Sample comprises of Teachers, Professors, Doctors, Chartered Accountants, Air Hostess, Bankers, Lawyers, Call Centre Employees and Corporate Sector Employees, of Ahmedabad city. 59 women were from New west Ahmedabad, 21 from west Ahmedabad, 8 from North and 8 from East Ahmedabad and 4 from south Ahmedabad.

The survey was considered to be a suitable research method for data collection in this study. A self-administered questionnaire was the primary survey instrument for data collection and was selected because it addresses the issue of reliability of information by reducing and eliminating differences in the way that the questions are asked, and how they are presented. Taking this into consideration, a structured schedule using 11 Likert Scale statements along-with other closed ended questions was presented to respondents for primary data collection. After cleaning and completing data, 100 responses were considered for data analysis. Initially the questionnaire was tested for its reliability on the basis of the responses from 50 respondents using Cronbach's  $\alpha$  which was found to be 0.764 which indicates a fair reliability of the questionnaire.

### Statistical Tools

To meet the objectives, simple techniques like Frequency Counts and Percentages were used for data analysis. Descriptive and Inferential Measures were used to analyse the data and meet the objectives of the study.

### Data Analysis

All the questionnaires were coded and checked for incompleteness and inconsistencies. After

cleaning the data, tables were prepared, Frequencies and Percentages were derived.

The demographic profile of the respondents is as follows:

Sr. No.	Demographics	Frequency
1	Age	
	Below 25 years	31
	26 years to 35 years	42
	36 years to 45 years	17
	46 years to 55 years	8
	Above 55 years	2
2	No. of years working	
	1 year to 5 years	38
	5 year to 10 years	24
	more than 10 years	22
	Less than 1 year	16
3	Occupation	
	Teacher/ Professor	30
	Company Employee	29
	Others	20
	Doctor	8
	Call Centre Employee	5
	Banker	4
	Lawyer	1
	Air Hostess	1
	Company Secretary	1
	Chartered Accountant	1
4	Monthly Income	
	Below Rs.10,000	43
	Rs.20,000 - Rs.50,000	31
	Rs. 10,000 - Rs.20,000	22
	Above Rs.50,000	4
	Below Rs.10,000	43
5	Marital Status	
	Married	54
	Single	42
	Divorced	2
	Separated	1
	Widow	1

Chi-square test was run on cross tabulation to analyse the relationship between demographic variables and the problems faced by working women. Following hypothesis were framed:

### Hypothesis

Hypothesis 1:

**H0:** Age of the respondents doesn't have any significant relation with the stress faced by them.

**H1:** Age of the respondents have significant relation with the stress faced by them.

To test the above hypothesis chi-square statistics was calculated as below:

$$\text{Where } E_j = \frac{R_i \cdot C_j}{G}$$

Where  $O_{ij}$  = observed frequency in the i-j<sup>th</sup> cell

$E_{ij}$  = expected frequency of the i-j<sup>th</sup> cell

$R_i$  = Row Total of i<sup>th</sup> Row

$C_j$  = Column Total of the j<sup>th</sup> Column

G = Grand Total

The calculated value of chi-square statistic for Hypothesis 1 was found to be 0.160 which is more than the p value of 0.05. Hence the null hypothesis is rejected thereby concluding that Age of the respondents have significant relation with the stress faced by them.

### Hypothesis 2:

**H0:** Age of the respondents doesn't have any significant relation with the family problems faced by them.

**H1:** Age of the respondents has significant relation with the family problems faced by them.

The calculated value of chi-square statistic for Hypothesis 2 was found to be 0.005 which is less than the corresponding chi-square of 0.05. Hence the null hypothesis is accepted thereby concluding that age of the respondents doesn't have any significant relation with the family problems faced by them.

### Hypothesis 3:

**H0:** Age of the respondents doesn't have any significant relation with the feeling of harassment by male colleagues.

**H1:** Age of the respondents have significant relation with the feeling of harassment by male colleagues.

The calculated value of chi-square statistic for

Hypothesis 3 was found to be 0.243 which is more than the p value of 0.05 Hence the null hypothesis is rejected thereby concluding that age of the respondents have significant relation with the feeling of harassment by male colleagues.

### Hypothesis 4:

**H0:** Marital Status of the respondents doesn't have any significant relation with the stress faced by them.

**H1:** Marital Status of the respondents has significant relation with the stress faced by them.

The calculated value of chi-square statistic for Hypothesis 4 was found to be 0.097 which is more than the p value of 0.05. Hence the null hypothesis is rejected thereby concluding that Marital Status of the respondents have significant relation with the stress faced by them.

### Hypothesis 5:

**H0:** Marital Status of the respondents doesn't have any significant relation with the feeling of harassment by male colleagues.

**H1:** Marital Status of the respondents has significant relation with the feeling of harassment by male colleagues.

The calculated value of chi-square statistic for Hypothesis 3 was found to be 0.623 which is more than the p value of 0.05 Hence the null hypothesis is rejected thereby concluding that Marital Status of the respondents have significant relation with the feeling of harassment by male colleagues.

### Major Findings of the Study

- From the survey of 100 respondents interrogated; 30 were Teachers/Professors, 8 Doctors, 1 Air Hostess, 1 Chartered Accountant, 4 Bankers, 1 Lawyer, 5 Call Center Employees, 29 Company Employees, 1 Company Secretary and 20 Women from other different occupations. Out of these 100 Women most of them

were either single or married falling in the Age Group of 25 to 35 years having salary of Rs.10, 000 to Rs.50, 000.

- A drastic change has been seen in earlier times' women and modern women. Earlier women were only confined to their household duties but modern women wanted to be independent, wanted to help the family, wanted to remain occupied and live decent living. 2% women are Breadwinner of their family and 1% women's Father or Husband want them to work.
- 50% women feel that they have to work harder to receive same benefits as compared to the male employees of their organization.
- 41% have to perform jobs that are irrelevant to their job skills.
- 46 women face traffic related problems while 32 and 16 of them feel poor road condition and straying animals while travelling to their workplace.
- 49 women face technical problems while working and 40 feel it's difficult to maintain co-ordination among employees at work and some of them feel role ambiguity.
- 71 women receive co-operative attitude from their boss while 15 receive indifferent attitude from their boss at work.
- 23% women face mental harassment at work while nearly 2% women face sexual harassment at work.
- 55% women get family support and co-operative attitude towards their job.
- Majority of the women have their own vehicle for the conveyance.
- Age of the respondents has significant relation with the feeling of harassment by

male colleagues and the stress faced by them but it doesn't have any significant relation with the family problems faced by them.

- Marital Status of the respondents has significant relation with the feeling of harassment by male colleagues and the stress faced by them.

## Conclusion

In spite of facing some problems at work place or at family, these women have paid no heed to all this and have continued working at their respective workplace's which shows their strong endurance. Policies and legal mechanisms alone cannot help in curbing the problems faced by women at work place - the overall attitude and acceptance level of the people needs to change. Letting women work outside home, does not mean that men and women are treated equally. The problems and difficulties that women face at their workplaces should be taken seriously and women should be given equal opportunities and equal treatment then only it can be said that men and women have equal status. Although there are various laws that are made for the protection of women even at workplace but due to lack of proper knowledge, implementation and interpretation of law, it has not been quite effective in protecting women from the discriminations at the workplace. Especially in urban areas and big cities organizations are going out of their way to ensure they provide safe work environment for their women employees, and are also putting up policies to ensure the women feel motivated to work and continue their career, even after child birth and this has been reflected by this study.

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## A Study on Corporate Social Responsibility Expenditure of Selected Companies in India

Dr. Rina Dave & Raj Pandit

### Abstract:

*The researcher fined the trend of corporate social responsibility expenditure made by firms in India, especially after the implementation of the new Companies Act, 2013. It studies the relationship between CSR expenditure and profits of the firm and highlights positive affects this relationship.*

### Key Words:

Corporate Social Responsibility, Profit, Expenditure, Public Sector, Private Sector

### Introduction:-

CSR has been accomplished by companies in the industrial world in a big way. A lot of multinational companies donate towards the betterment of the societies in which they function. A most notable example is Shell, an Anglo-Dutch multinational oil and gas company, which supports the local communities in Nigeria. In India, big scale charitable activities were undertaken post-independence, which led to the setting up of some of the most influential institutions & Companies which has contributed by making donations to non-governmental organizations (NGOs) and their own trusts, which were deductible under Section 80 G of the Income Tax (IT) Act.

### CSR as per Mandate of Companies Act 2013

To organize the charitable activities and guarantee more accountability and clearness, the government of India made it compulsory for companies to carry out CSR activities under the Companies Act, 2013. The thought of CSR is defined in section 135 of the Companies Act 2013 and it is applicable to companies which have an annual turnover of Rs 1,000 cr. or more, or a net worth of Rs 500 cr. or more, or a net profit of Rs 5 cr. or more.

As per these Section, these companies are believed to keep at least 2% of their average profit of last three years for CSR activities. In Companies Act 2013 wide list of CSR activities is mentioned, which cover activities such as promotion of education, gender equity and women's empowerment, awareness on HIV/AIDS, malaria and other diseases, abolition of extreme poverty, contribution to the Prime Minister's National Relief Fund and other many more things.

The companies can carry out these activities by



collaborating either with a NGO, or through their own trusts and foundations or by pooling their resources with another company. The law also entails setting up of a CSR committee which shall be responsible for decisions on CSR expenditure and type of activities to be undertaken. This committee shall consist of three or more directors, with at least one independent director whose presence will ensure a certain amount of democracy and diversity in the decision-making process.

### Reporting of CSR Activities Made Mandatory

Prior to 2012-13, many firms were voluntarily making donations and spending on community development and mitigation of environmental pollution. It is only since 2012-13 that firms have started allocating funds for CSR activities specifically. This was in response to the [Securities and Exchange Board of India \(SEBI\) circular](#) dated August 2012, which mandated all top 100 listed companies to include business responsibility report as a part of their annual report.

Therefore the year 2012-13 marks a turning point, where we can see a difference in the CSR expenditures adopted by the firms. We have compared the donations made and CSR expenditure incurred by firms in the last three years and in the year 2012-13 was aggregating more than previous year.

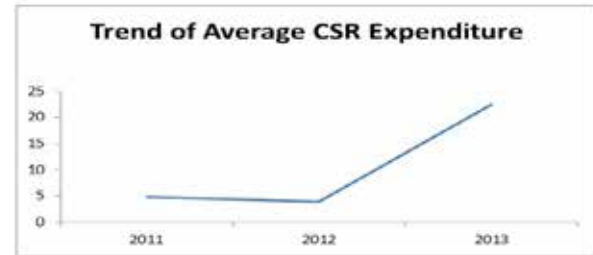
### Objective of the Study

1. To study the trend of corporate social responsibility expenditure in India.
2. To compare the csr expenditure of private and public sector firms.
3. To study the pattern of top 300 firms for CSR Expenditure

### Trends of Corporate Social Responsibilities Expenditure in India

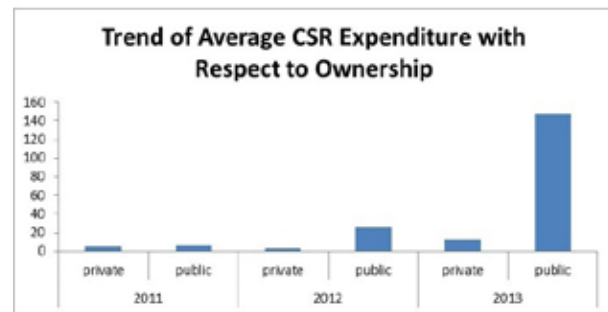
From the above mention figure we can analyze that from 2011 to 2012 to 2013 the trend is increased highly so we can say that is the effect of the notification issued by SEBI in

2013 for the making expenditure on CSR.



X-axis: Year; Y-axis: Average CSR expenditure of all firms (in million rupees) Source: Calculated by the authors using Prowess data for the year 2012-13.

### Comparison of the CSR Expenditure Trend with Respect to Ownership



X-axis: Year and Ownership; Y-axis: Average CSR expenditure (in million rupees) Source: Calculated by the authors using Prowess data for the year 2012-13

As from the above mentioned table it can be analyzed simply that year by year expenditure on CSR is on increasing trend and public sector firm is giving more importance on CSR Expenditure than private sector firms. CSR expenditure by public sector firms increased considerably in 2012-13 compared to 2011-12. The passage of the Act also led to an increase in the average CSR spending of public sector firms from Rs 25.72 million in 2012 to Rs 147 million in 2013.

### Pattern of CSR Expenditure by Major Firms in 2012-13

We studied the CSR activities undertaken by the top 200 firms by going through their annual reports for the year 2012-13 in order to better understand the nature of those activities and the driving forces that induced those activities. Although some studies (Singh and Aggarwal 2013) have looked at types of CSR activities undertaken by Indian companies, we

have covered a larger number of firms across ten industries and have done an industry level analysis.

Until 2013, many firms had disclosed the activities undertaken by them, but not the exact amount they spent on each activity. We find that most of the firms undertake CSR expenditure for the welfare of rural communities, especially around their areas of operation. A possible reason could be to generate goodwill amongst people in the neighbourhood and become familiar with the area and its needs, which in turn would minimise costs of providing services. Contrary to the developed countries where CSR activities are undertaken mainly in the area of environment, in India it is mainly undertaken in the social sector.

In light of the recent legislation, it would be interesting to see how companies would change their CSR strategies. After community

development, education (including skill development) attracts the largest share of CSR expenditure. Health is also a major area where firms like to invest. The following table gives an industry-wise breakup of the major CSR activities undertaken by each industry.

**TABLE 1: Industry-wise Segregation of Major CSR Activities Undertaken by Firms in 2012-13**

**Oil and Gas Sector:** In the oil and gas sector, public sector undertakings have been found to spend the most on development of townships and community, with a special focus on education. They undertake community development in and around their areas of operation. This may be because the communities living close to their area of operation are most affected by negative production externalities. Hence the

Industry	Health	Education	Community Development/Rural Development	Environment	Total
Oil & Gas	23.50%	35.29%	29.41%	11.76%	100%
Automobile	40.00%	10.00%	40%	10%	100%
Consumer Durables	24.76%	21.34%	15.25%	28.75%	100%
Iron & Steel	35.29%	23.53%	35.29%	5.88%	100%
Banking & Financial Services	8.57%	20.00%	48.57%	35%	100%
Power	10.00%	10.00%	45%	35%	100%
Infrastructure	8.35%	30.55%	44.44%	16.66%	100%
Cement	22.20%	25.00%	29%	23.8%	100%
Paper & Pulp	19.90%	24.10%	18%	38%	100%
Pharmaceutical	30.00%	28.00%	22.00%	20.00%	100%

Source: Calculated by the author from the annual reports of the top 200 firms for the year 2012-13

firms undertake CSR spending in order to reduce the negative effects of their production activities. They organize health camps, which provide free medical check-ups to people. For example, the Indian Oil Corporation runs mobile medical units in Mathura and has setup a nurse training institute in Digboi, Assam. It has also spent a lot on the school education of children who live near their plants and in their townships.

**Iron and Steel Sector:** In the iron and steel sector, the Steel Authority of India Limited (SAIL) has invested in health and education infrastructure for its employees. Many firms spend on skill development programmes, which help in building human capital leading to better employment prospects for people. The firms fund the school education of the children living in the nearby communities and give scholarships for higher education as well.

**Banking Sector:** Companies in the banking sector spend mainly on priority sector areas. They count the 40% mandatory priority sector lending as a part of their CSR activities. However, banks such as Jammu and Kashmir Bank undertake activities other than priority sector lending also. They support schools and provide funds for meeting educational expenses. Studies have shown that banks spend more on education and environment in order to strengthen their image and increase consumer satisfaction (Narwal 2007). Large banks tend to take on more CSR activities to signal better market performance, while relatively less profitable or smaller banks may want to increase their CSR initiatives to build stronger relationships with its stakeholders (Narwal 2007).

In a content analysis study, it has been found that Indian banks differ in their CSR orientation with respect to their ownership structure, number of employees, and date of its incorporation (Singh and Aggarwal 2011). It has been found that there is a significant difference in orientation in the areas of environment and rural development (when comparing banks with respect to ownership),

in community welfare and environment and rural development (when comparing banks with respect to number of employees), and in environment and market place (when comparing banks with respect to the date of incorporation of the bank) (Singh and Aggarwal 2011). Indian banks no longer see CSR as charity, but they see it as a way of building their image and marketing their products.

**Automobile Sector:** Most of the companies in the automobile sector spend mostly on environmental sustainability, while some like Tata motors focus more on education and skill development. Mahindra and Mahindra focuses more on environment by committing to reduce greenhouse gas emissions. It has introduced various sustainability measures in its plants like buildings and water efficient plants. This can be attributed to the fact that the automobile sector is one of the most polluting industries in India.

The Centre for Science and Environment (CSE) has given a very low score to Tata motors and Mahindra and Mahindra in its green rating programme. Hence this may explain their CSR orientation towards environment. While Maruti Suzuki, which has a comparatively higher score in green rating, has spent more on employee welfare than on environment related activities. This suggests that firms which are comparatively more polluting are more driven towards environment in their CSR orientation. This may be to avoid possible future environmental regulations.

**Cement Industry:** Cement industry is one of the most polluting industries in India. Shree Cements which was given a very low rating by the CSE Green Rating programme has focussed more on sustainability. It has adopted the “triple bottom line” approach, where the focus is on profit maximisation, employee welfare and environmental sustainability. In its sustainability report, it has focussed on climate change and reduction of greenhouse gases during production.

Grasim Cements, which has a comparatively

higher rating, has focussed more on community development and rural development. Their CSR spending has been directed towards health care, mother and child welfare and education. Gujarat Alkalies and Chemicals Limited (GACL) and Madras Cement Limited (MCL), which are subsidiaries of Ramco Cements, spend on community development and environment. GACL has undertaken clean development mechanism in order to reduce greenhouse gas emissions. Ultratech Cement's CSR strategy is oriented more towards community development. It has conducted health camps in rural areas around its plants and has encouraged sustainable livelihood through watershed management and environment.

**Paper and Pulp Industry:** In the paper and pulp industry, Ballarpur Industries (BILT) has focused on sustainable development. Its CSR strategy focuses on rural development, with an emphasis on environment and communities. Similarly, JK Paper emphasizes on social farm forestry and even publishes a bi-annual environment compliance report. Andhra Pradesh Paper Mills also focuses on environmental sustainability.

**Power Sector:** In the power sector, firms spend predominantly on community and rural development. They undertake development measures for communities which stay close to their plants through foundation and trusts. They emphasize on the provision of educational facilities and skill development programmes. For example, Jindal Steel carries out its CSR activities through its own trusts, which lead to saving of transaction costs and creation of goodwill in the local area. Public sector units like NHPC and NTPC focus on rehabilitation and resettlement of the communities displaced by construction projects. Since these plants cause damage to the surrounding areas, CSR activities may help in circumventing agitation by the local community and NGOs.

**Consumer Durables:** In the consumer durables and fast moving consumer goods industry, companies focus on healthcare and education.

The Godrej group supports environmental sustainability by supporting conservation of mangrove forests and undertakes philanthropic activities in the health and education sector. They conduct blood donation camps, conduct cleft lip surgeries with Smile Train, a NGO. Similarly, *Hindustan Unilever* (HUL) focuses on improving health and well-being and reducing the environmental impact of its production activities. Hence in the consumer durable and fast moving consumer goods sector, we find that companies spend mainly on education and health initiatives.

**Pharmaceutical Companies:** Companies in the pharmaceutical sector spend mainly on education and health initiatives. Since pharmaceutical companies operate in the health sector and have enough skilled manpower, they conduct many health camps in rural areas. The thrust of their CSR activities is to make healthcare accessible to the marginalized sections of the society. Companies like Aurobindo Pharma, Cadila Healthcare, Sun Pharma and Ajanta Pharma conduct medical camps, while GlaxoSmithKline focuses on the development of communities which reside near their plant.

**Infrastructure Sector:** In the infrastructure sector, firms spend heavily on community development programmes. We have taken firms engaged in construction, engineering, ports, shipping, road transport under infrastructure sector. These firms spend in the development of rural areas. They support the mid-day meal programmes in schools and skill development programmes for women and youth. When it comes to CSR implementation, we find that these firms undertake CSR mostly through foundations and NGOs

### Concluding Remarks

The concept of CSR has the potential to bring a revolution in the development of the economy. With rising fiscal deficit and leakages in the welfare schemes, CSR seeks to address the problems of society in a cost effective manner.

The concept has the potential to generate Rs 20,000-25,000 cr. every year, which can give a boost to investment in human and physical capital. Presently, CSR expenditure is mostly incurred at the local level through the foundations established by firms. This aligns CSR initiatives with the ideology of the firm and minimizes transaction costs for it. For efficient utilization of funds allocated for CSR and full realization of potential benefits, these expenditures need a direction.

Though the new Companies Act, 2013, which made spending 2% of their profits on CSR mandatory, came into force only in April 2014, the last couple of years have seen a significant increase in CSR expenditure by firms. This can be attributed to the desire of companies to project them as socially responsible. The CSR expenditure by firms is affected by the industry to which they belong. Firms in polluting industries spend more on activities

related to the environment, while firms in the iron and steel and power sector spend more on local community development, as their projects cause large-scale displacement. They also do it in the hope that it might prevent future boycott and protest movements.

Until now, donations by firms were driven by their interests; it was arbitrary, and in some cases very small in comparison to the size of the firms. The CSR activities of the firms depended upon the nature of their industry and restricted to the area where the firm was located. This was largely driven by factors such as cost minimization and “visibility” among the consumers. But this may change with the new law. Firms may be driven to diversify their areas of operation and part of population which had been left behind in the development process may gain tremendously from this.

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## Effect of Demonetization on E-Payment: With Special Reference to PayTM

Amrita Singh & Poonam Tiwari

### Abstract:

*Demonetization on 9th November 2016 forced to change the buying habits of the Indian consumer. People have no other option for transaction, so they started adopting the cash to digital transaction system. India's cash transaction value as percentage of total transactions is pretty high at 68% in comparison to other developed countries as it is 20% in US, 14% in USA, 11% in UK and 8% in France.*

*This study focuses on the change in buying behavior of consumer after demonetization and also analyzes, how the people who have never used ATM, payTM, online shopping etc. has become digitalized. The study is based on primary as well as secondary data and the results will reveal the impact of demonetization on the consumer behavior and how it impacted the business of digital services providers.*

### Key words:

Demonetization, m-wallets, Paytm

### Introduction

“Paytm Karo” or “use Paytm” became the new buzz as Paytm, the country's largest mobile wallet, became an alternative for cash for many.

A thought process has been started for Cashless India on 15th Aug. 2014 when Prime Minister announced opening of Jan-dhan accounts on affordable cost for poor and unbanked areas under financial inclusion. Under the same process, lastly on 8th Nov. at 8.00 p.m, he announced that i.e. from 9th Nov. 2016, old notes of denomination of Rs.500/ and Rs.1000/- will not be in use except some lifesaving services for time being.

The demonetization of the highest denomination currency notes is part of several measures undertaken by the government to address tax evasion, counterfeit currency and funding of illegal activities. India has one of the highest levels of currencies in circulation at over 12% of GDP and of this cash, 87% is in the form of Rs500 and Rs1, 000 notes.

We can simply visualize that how cash crunch is boosting the cashless economy as due to ban on Rs.500 and Rs.1,000/- notes has led people to turn to cashless options such as debit, credit cards, IMPS, PAYTM, and mobile wallets.

India's cash transaction value as percentage of total transactions is pretty high at 68% in comparison to other developed countries as it is 20% in US, 14% in USA, 11% in UK and 8% in France.

### Literature Review

According to **Manpreet Kaur (Assistant Professor: SGTB Khalsa College, Anandpur Sahib)** Demonetization is a generations' memorable experience and is going to be one of the economic events of our time. Its impact is felt by every Indian citizen. Demonetization affects the economy

through the liquidity side. Demonetizing is Progressive shift to a cashless economy with a greater focus on electronic transactions is being envisaged. Rising use of credit/debit cards, net banking and other online payment mechanisms will be another positive effect of demonetization, as these would not only lower transaction costs but some of these could help earn some fee income as well.

According to **Annamalai, S. and Muthu R. Iiakkuvan (2008)** in their article "Retail transaction: Future bright for plastic money" projected the growth of debit and credit cards in the retail transactions. They also mentioned the growth factors, which leads to its popularity, important constraints faced by banks and summarized with bright future and scope of plastic money.

According to **Alvares, Clifford (2009)** in their reports "The problem regarding fake currency in India." It is said that the country's battle against fake currency is not getting easier and many fakes go undetected. It is also stated that counterfeiters hitherto had restricted printing facilities which made it easier to discover fakes.

According to Ashish Das, and Rakhi Agarwal, (2010) in their article "Cashless Payment System in India- A Roadmap" Cash as a mode of payment is an expensive proposition for the Government. The country needs to move away from cash-based towards a cashless (electronic) payment system. This will help reduce currency management cost, track transactions, check tax avoidance / fraud etc., enhance financial inclusion and integrate the parallel economy with main stream.

According to **Jain, P.M (2006)** in the article "E-payments and e-banking" opined that e-payments will be able to check black. An Analysis of Growth Pattern of Cashless Transaction System. Taking fullest advantage of technology, quick payments and remittances will ensure optimal use of available funds for banks, financial institutions, business houses and common citizen of India. He also pointed out the need for e-payments and modes of

e-payments and communication networks.

According to **Linux Mint and digital analytics firm Kalagato** although all mobile wallets have been helped greatly by demonetization, Paytm has benefited somewhat disproportionately in terms of volumes. We suspect this is because of its massive and relentless advertising campaign in recent weeks. Average refill values for wallets are up across the board. We will keep track of this data over the next few months to see whether the wallets will be able to sustain and expand these numbers or if this is a temporary phenomenon that will fade as cash circulation increases.

**Auwal Kabir, Siti Zabedah Saidin, Aidi Ahmi** in their article Adoption of e-Payment Systems: A Review of Literature, "E-payment system is increasingly becoming a daring means of payments in today's business world. This is due to its efficiency, convenience and timeliness. It is a payment system that is continuously being embraced and adopted in the financial system of both developed and developing countries with a view to simplify and ease payments in business transactions. As a result, many studies were conducted around the globe by scholars on e-payment adoption. It is based on this that this research paper looks at the available past literature on e-payment adoption across the world, with a view to highlight the scope, methodology and Information System (IS) models used by previous researchers to identify research gaps and recommend such for future studies. The study employed an extensive literature search on e-payment adoption with the aid of Google Scholar for those recent studies between the years 2010-2015.

**Prof. Eduardo Henrique Diniz, Prof. Joao Porto de Albuquerque Prof. Adrian Kemmer Cernev** in their article, Mobile Money and Payment: a literature review based on academic and practitioner-oriented publications (2001-2011) The use of mobile technology has become widespread with astonishing speed all over the world,

particularly among the poor. The more mobile phones go to the hands of people who formerly lacked access to financial services, the more the notions of mobile money, mobile payment and mobile banking become pervasive as a means of financial inclusion.

## Research Methodology

### Research Objectives

#### Primary Objective

- To study perception of consumers towards using m – payment
- To find out the preferences of the consumer regarding use of different m- wallets

#### Secondary Objectives

- To find out the problem faced by consumer post – demonetization

### Sampling Design

The size of sample selected for the research is 450 out of which 326 respondents were aware and user of Paytm.

Descriptive research design has been taken for the research purpose. Descriptive studies are undertaken when researcher is interested in knowing the characteristics of certain group such as age, education, sex, level or income level.

### Sampling Plan

- Sample size : 326 respondents  
 Research tool : Questionnaire  
 Sampling region : Vadodara

### Hypothesis

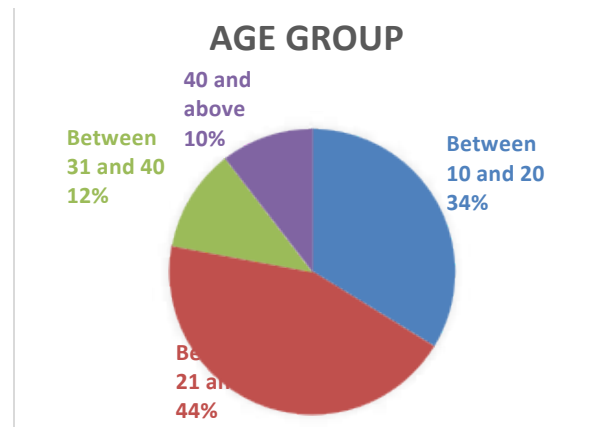
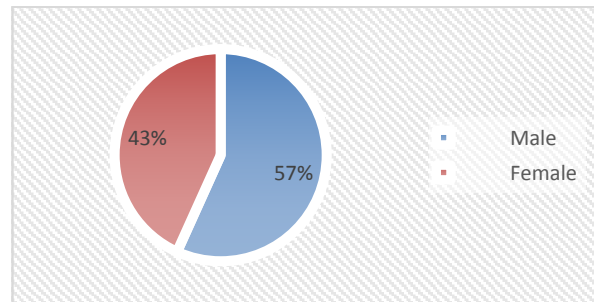
#### Hypothesis 1

Null Hypothesis ( $H_0$ ): - Users of Paytm before Demonetization and After Demonetization Are Same

Alternate Hypothesis ( $H_a$ ): -User of Paytm After Demonetization Is More Than Before

### Data Analysis and Interpretation.

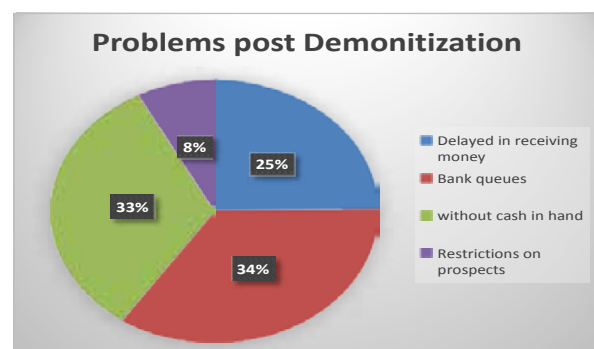
The demographic analysis is always important



for any research we collected sample from total 326 respondent out of which 185 (57%) respondent were male and 141 (43%) respondent were female, we also divided the respondent in 4 groups on the basis of their age total, 110 (34%) respondent were of the age between 10 to 20, 144 (44%) were age between 21 to 30, 38 (12%) were age of 31 to 40, and 34 (10%) were age above 41.

### Problems Faced after Demonetization

In the sample of 326 total, 81 (25%) of the sample were not able to get their own money from the bank, 113 (34%) of the sample were standing in the bank queue to withdrawal money, 107 (33%) of the samples had to manage without cash for few days, 25 (8%) of the sample had to postpone their future.

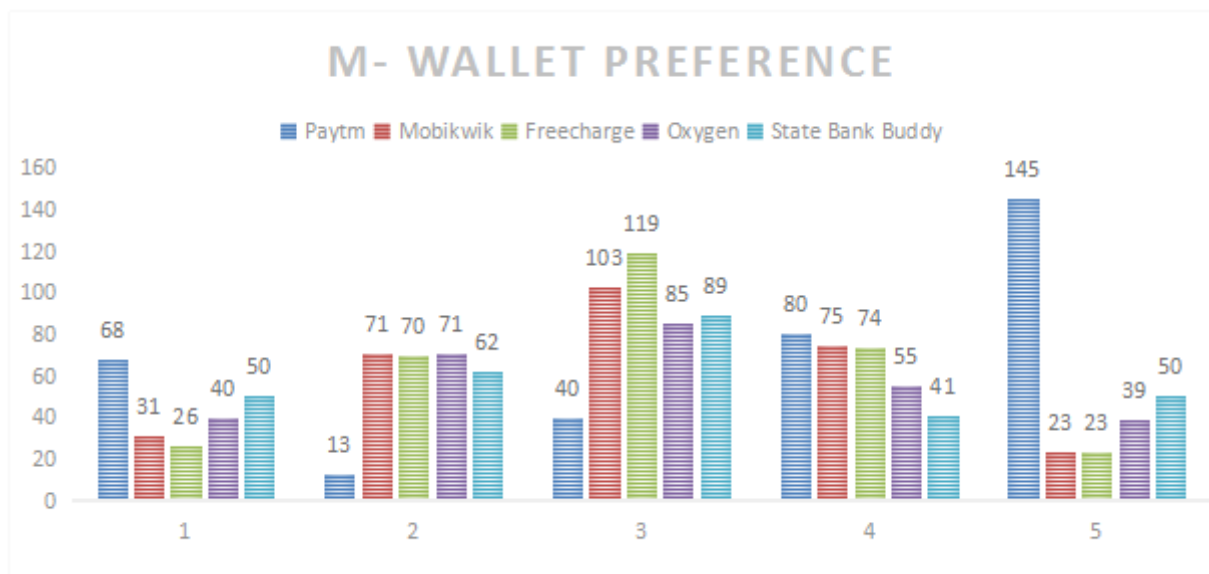




### Most Preferred mobile wallet

We conducted survey for 326 respondents and asked them to rate the few mobile wallets according to their preference 1 being the lowest and 5 being the highest, and Paytm has got highest ranking as compared to other wallets i.e. Mobikwik, Freecharge, Oxygen, State Bank Buddy.

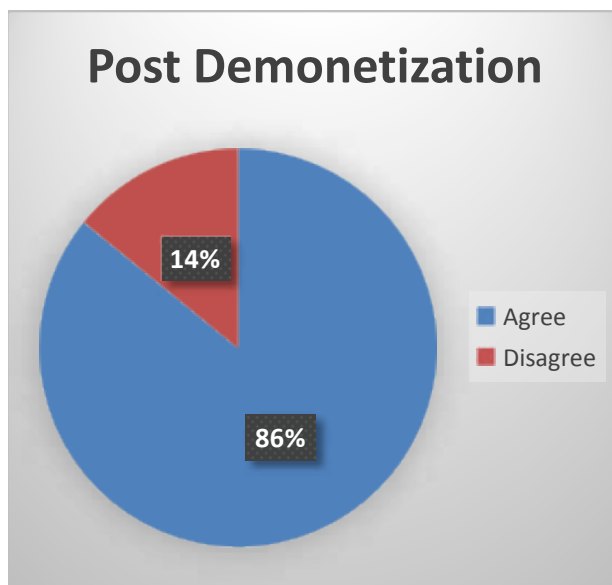
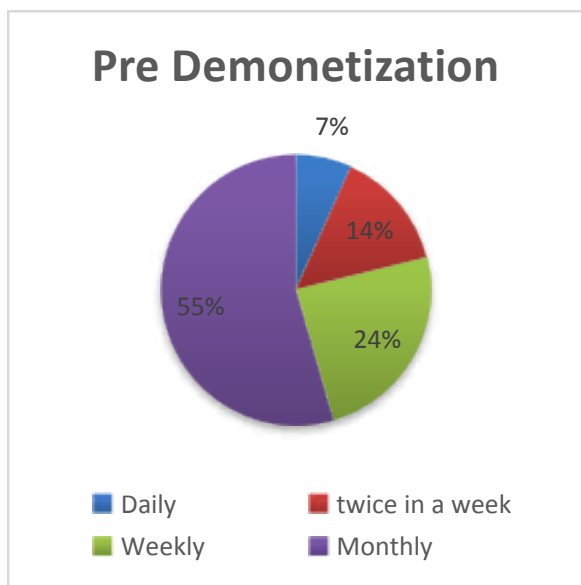
According to your preference rate the following m-wallets?	f	f	f	f	f
	1	2	3	4	5
Paytm	48	13	40	80	145
Mobikwik	31	71	103	75	23
Freecharge	26	70	119	74	23
Oxygen	40	71	85	55	39
State Bank Buddy	50	62	89	41	50



### Increase in Paytm Usage Pre and Post Demonetization

<i>How often did you use paytm before demonetization?</i>	Total	Percentage (%)	<i>How often do you use Paytm after demonetization?</i>	Total	Percentage (%)
Daily	21	6.4417	Daily	60	19
twice in a week	45	13.803	twice in a week	101	31
Weekly	76	23.312	Weekly	89	27
Monthly	170	52.147	Monthly	74	23
None	14	4.2944	None	2	0.6
	326	100		326	100

From the population we surveyed we concluded that Paytm saw near 12% increase in the daily usage and nearly 17 % twice in a week which was a remarkable increase



### Reasons to use Paytm

After Having the data of most preferred wallet, we tried to find out the reasons to be the most preferred wallet, so we asked respondent to rate the offers of the wallet (5 being the highest and 1 being the lowest) and out of 326 respondents 44% rated cash back as the highest 35% rated for coupon and so on.



### Conclusion

People in India faced cash crunch in the period of demonetization. But after demonetization there was a positive shift in the use of PayTM, it is now used for online as well as offline. The mobile paytm is preferred for its cash back and other offers as compared to its competitors. The usage of paytm has increased after demonization but companies must try hard to maintain it as the increase of cash is likely to increase after the cash crunch is over which is the major challenge the digital industry is likely to face

## One - tailed Test

$\bar{x}_1 = \text{Users } \phi \text{ Paytm Before Demonetization}$

$\bar{x}_2 = \text{Users } \phi \text{ Paytm After Demonetization}$

$$\begin{aligned}\bar{x}_1 &= \frac{\sum x_i}{n_1} \\ &= \frac{312}{4} \\ &= 8 \text{ Average Users}\end{aligned}$$

$$\begin{aligned}\bar{x}_2 &= \frac{\sum x_i}{n_2} \\ &= \frac{326}{4} \\ &= 81.5 \text{ Average Users}\end{aligned}$$

Step1

$$H_0 : \mu_1 = \mu_2$$

$$H_1 : \mu_2 > \mu_1$$

Step2

$$Z_c = \frac{\text{difference}}{S.E.}$$

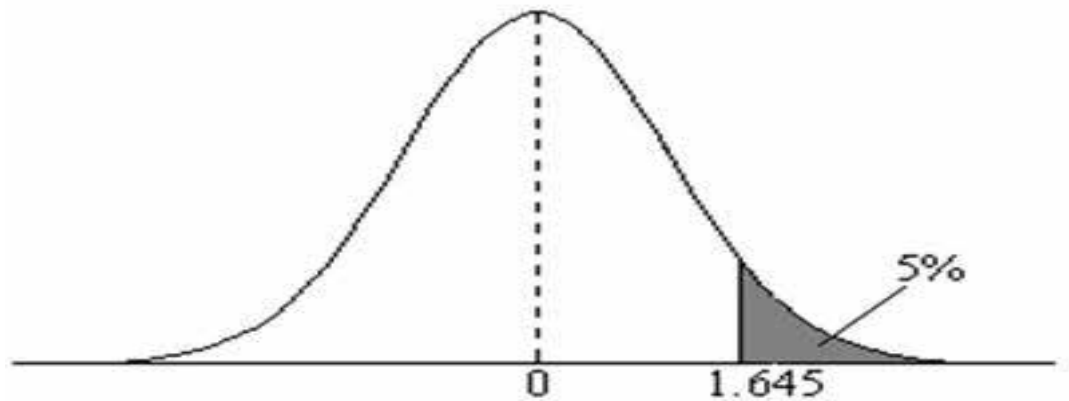
$$\begin{aligned}\text{difference} &= |\bar{x}_1 - \bar{x}_2| \\ &= |8 - 81.5| \\ &= 3.5\end{aligned}$$

$$S.E. = \sqrt{\frac{\sigma_1}{n_1} + \frac{\sigma_2}{n_2}}$$

$$\begin{aligned}\sigma_1 &= \sqrt{\frac{\sum (x_i - \bar{x}_1)^2}{n_1}} \\ &= \sqrt{\frac{(312 - 8)^2}{312}} \\ &= \sqrt{\frac{54756}{312}} \\ &= \sqrt{175.5} \\ &= 13.2\end{aligned}$$

$$\begin{aligned}\sigma_2 &= \sqrt{\frac{\sum (x_i - \bar{x}_2)^2}{n_2}} \\ &= \sqrt{\frac{(326 - 81.5)^2}{326}} \\ &= \sqrt{\frac{59780.25}{326}} \\ &= \sqrt{183.375} \\ &= 13.5\end{aligned}$$

$$Z_t = (5\% \text{ Significance Level})$$



(a) One-tailed test

$$Z_t = 1.645$$

$$\therefore Z_c > Z_t$$

$\therefore H_0$  is rejected and

$H_1$  is accepted

$\therefore \mu_2 > \mu_1$ , Which Tells Us That Population Mean of Paytm Users After Demonetization is Greater Than Population Mean of Paytm Users Before Demonetization.

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## Job Satisfaction Among Employees Engaged in Selected Hospitals of Vadodara City

Dr. Sushilkumar M. Parmar

### Abstract:

*Undoubtedly, stressful, uncomfortable work life and unprogressive human resource policies and practices in the hospital set up compel an employee to quit the job and hence, it becomes imperative for the management to take necessary actions to reduce the attrition rate. This dissatisfaction among the employees leads to the non-achievement of organizational goals and also hampering its image. The primary objectives of this empirical research were to study the level of job satisfaction among the employees engaged in hospitals and to understand the impact of selected variables such as compensation system, suitable working condition and superior support on job satisfaction. This research is based on mainly primary data collected through a structured non-disguised questionnaire.*

### Key Words:

Job Satisfaction, Compensation, Superior Supports, Working Condition

### Introduction:

The rapid growth of healthcare sector has resulted into a considerable rise in revenue and employment opportunity. The giant healthcare sector includes hospitals, medical devices, clinical, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is expected to report the compound annual growth rate of 22.9 per cent during 2015-20 to US\$280 billion. The unprecedented growth has been observed due to the larger pool of well trained medical professions and employees engaged in the healthcare sectors. As a matter of fact, India is the country where multispecialty hospitals offering cost effective medical treatment are good in number. Talking about working in such hospitals is quite challenging and sometimes stressful because it is not the same as the corporate set up. Besides, employees engaged in the hospitals are to deal with the patients who have been going through the pain and trauma. Hence, it becomes essential for hospital management to provide improved quality of work to employees. In the hospital set up, management has to smartly deal with the employees to keep them satisfied. Actually, there is variety of factors making one's job joyful and without stress in the hospitals. The researcher has tried to offer insights on job satisfaction among employees engaged in the hospitals. Job Satisfaction is a feeling of fulfilment or enjoyment that a person derives from their job. Similarly, it also refers to the level of contentment employees feel about their work which can affect performance. In fact, Job Satisfaction falls into two levels, affective job satisfaction and cognitive job satisfaction. Affective job satisfaction is a person's emotional feelings about the job as a whole while cognitive job satisfaction is how satisfied employees feel concerning some aspect of their job such as pay,

hours and benefits. Job satisfaction is a more of journey, not a destination as it applies to both employees and the employer. Robbins and Sanghi (2006) stated, that Job satisfaction is collection of feelings that an individual holds toward his or her job.

### **Statement of Research Problem:**

As the entire hospital set up is quite different from that of corporate, the work life in hospital is generally viewed as stressful and challenging. In fact, one has to deal with those who are going through pain and trauma due to their health issues. And therefore, for hospital staffs it may be quite difficult to offer quality patients care and this may also lead to higher labour turnover rate and dissatisfaction. To take care of patients effectively, it becomes imperative to keep employees satisfied and motivated. Thus, the research has attempted to identify and study factors affecting job satisfaction among employees engaged in hospitals.

### **Review Of Literature:**

Cavanagh (1992), asserted that job satisfaction impacts on patients care. Fako (2000), argued that nursing staffs with low job satisfaction may find it difficult to provide a quality patient care. Dolan (2003), pointed out that Job related factors such as low pay, abuse by demanding patients, lack of appreciation from doctors, work pressure, work environment related factors and lack of opportunities for advancement are reasons leading to nursing skills losses. Pietersen (2005), found that nearly 50 percent of nursing staffs of Government hospital were satisfied. The author studied both intrinsic and extrinsic factors of job such as working conditions, supervisor, pay, the job itself, organization and promotion on job satisfaction was studied. Results of the study indicated that majority of nursing staffs were dissatisfied with supervisor and pay. Besides, there existed intrinsic and extrinsic factors of job which could negative

affect the turnover rate of nursing staffs. Rajam, K et al (2013), undertook a research study aiming at studying workers' perception about the hospital and job and identifying factors affecting job satisfaction. The researchers discussed the various dimensions viz. salary, working condition, social security schemes, welfare measures, sales promotion and trade promotion. The findings showed that 46 percent of respondents are strongly agreed to job satisfaction. Similarly, a significant difference was found between the experience of respondents and their overall job satisfaction. Besides, it was suggested to increase employees' participation in decision and to develop opportunities and rewards. Rees et al (2013) concluded that employees demonstrate their higher level of performance if in suitable working conditions. Jha et al (2016), opined that job satisfaction is an important factor which determines efficiency of hospitals resultantly to give rise to decreased absenteeism, stress and turnover. Moreover, the authors pointed out that job satisfaction has a closer relationship with the factors such as performance appraisal system, rater, link between reward and rating and performance expectation. Nemmaniwar and Deshpande (2016), concluded that other than monetary benefits other motivational factors namely recognition, autonomy, achievement, opportunities for growth and development are positively correlated with job satisfaction. In addition to this, job satisfaction leads to job performance and organizational commitment. Mendiratta (2016) carried out a comprehensive study to know employee engagement initiatives taken up by SPS Apollo Hospital and how they keep employees satisfied and to understand employees' level of satisfaction. It was found that 60 percent of employees are overall satisfied with their job; similarly 72 percent of employees are satisfied with performance appraisal and benefits that they receive. Besides, employees' involvement, interest in their career aspiration, personal lives, performance based compensation plan,

regular feedback and opportunities to share their knowledge were recommended.

**Significance of Research:**

This study has offered the greater insight on job satisfaction and work life of employees working in the hospitals. Moreover, it is of an immense help to hospital management for keeping their employees satisfied and engaged and bringing down labour turnover rate.

Scope and Coverage of Research:

The present study covers the selected Government, Trust run and Private Hospitals of Vadodara City. The researcher has undertaken this empirical research taking four factors affecting Job Satisfaction namely compensation, superior support, opportunity of growth and advancement and working condition.

**Research Objectives:**

The researcher has carried out this study aiming at below research objectives.

- To study the level of Job Satisfaction among employees engaged in the hospitals
- To analyse the impact of selected factors namely Compensation System, Suitable Working Condition and Superior Support on Job Satisfaction

**Research Hypotheses:**

In line with the aforementioned objectives, the researcher has proposed following hypotheses.

Ho1: There is no significant impact of Compensation System on Job Satisfaction

Ho2: There is no significant impact of Suitable Working Condition on Job Satisfaction

Ho3: There is no significant impact of Superior Support on Job Satisfaction

Ho4: There is no significant impact of Opportunity of Growth & Advancement on Job Satisfaction

**Research Methodology:**

**Population:** The population of this research consists of employees working in hospitals located in Vadodara City.

**Sample and Sampling Method:** The researcher has used convenient sampling method in order to draw the representative sample. Representative sample units are those employees who are engaged in selected hospitals of Vadodara city. The sample size of this research study is of 80 employees.

**Types of Data:** The present study is based on both primary and secondary data. All relevant primary data were collected from selected employees working in selected Government, Trust run and Private Hospitals of Vadodara City. The names of hospitals have not been disclosed due to confidentiality matter. Whereas, secondary data from various sources such as journals, reference books, published articles and statistics were used.

Table Number 1 Type of Hospitals

Type of Hospital	Number of Selected Employees	Per cent
Government	31	38.75
Trust	39	48.75
Private	10	12.50
<b>Total</b>	<b>80</b>	<b>100</b>

**Data Collection Tool:** In order to obtain relevant data, the researcher has administered a structured non-disguised questionnaire containing 21 items and the responses were measured on five points Likert Scale, *Strongly Agree to Strongly Disagree*

**Statistical Tools:** The collected data were properly analysed and interpreted by using suitable statistical tools such as descriptive statistics, correlation and regression analysis.

**Discussion of Results and Findings:**

Table Number 2 Reliability Statistics



Factor	Selected Criteria	Number of Items	Cronbach $\alpha$
Compensation System	Fair and adequate salary / wage	06	0.867
	Regular Increment in pay		
	Proper Bonus System		
	Eligible to get fringe benefits		
	No discrimination in offering fringe benefits		
	Appreciation on major and minor achievement		
Suitable Working Condition	Flexible Working hours	05	0.550***
	Untiring work schedule		
	Availability of all necessary amenities such as canteen, washrooms, rest rooms, locker etc		
	Peaceful working atmosphere		
	Secured Job		
Superior Support	No pressurization from the superior	04	0.765
	Co-operative and friendly nature of superior		
	Counselling and support from superior		
	No mental and physical harassment		
Opportunity of Growth and Advancement	Scope for career advancement opportunities	05	0.829
	Arrangement of in house training programme		
	Encouragement and support in off job training and development programme		
	Participation in Decision Making Process		
	My job gives me the more opportunity to learn		
Job Satisfaction	Overall, I am satisfied	01	-----
Overall Questionnaire		21	0.909

The reliability statistics for independent and dependent variables given in the above table depict that the value of Cronbach alpha of the variables range from 0.550 to 0.867. While, the value of cronbach alpha for overall questionnaire is 0.909. Though a coefficient alpha of at least 0.70 is usually considered reliable, there is a general consensus among the researchers that the acceptable alpha limit could be as low as 0.60 or 0.50\*\*\* for scales consisting of a small number of items (Carmines & Zeller, 1979; Cronbach & Meehl, 1955; Pedhazur & Schmelkin, 1991; George & Govindan, 2015).

Table Number 3 Descriptive Statistics

Factors	Mean	Std. Deviation
<u>Independent</u>		
Compensation System	3.1917	1.00739
Suitable Working Condition	3.7675	.65560
Superior Support	3.8656	.89826
Opportunity of Growth and Advancement	3.1000	1.05591
<u>Dependent</u>		
Job Satisfaction	4.0375	.87791

The above table shows that the highest mean is of Job Satisfaction (4.0375) followed by superior support (0.386) and suitable working condition (3.7675) whereas the lowest mean value is of opportunity of growth and advancement (3.10).

Table Number 4 Correlation Analysis

		Compensation System	Suitable Working Condition	Superior Support	Opportunity of Growth & Advancement	Job Satisfaction
<b>Job Satisfaction</b>	Pearson Correlation	.612**	.380**	.588**	.605**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	80	80	80	80	80

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

As shown above, there exists slightly high positive correlation between Job Satisfaction and compensation system (0.612) and Opportunity of Growth and Advancement (0.605). Similarly, a moderate positive correlation is reported between Job Satisfaction and Superior Support (0.588). While, there is a low positive correlation between Job Satisfaction and Suitable Working Condition (0.380).

Table Number 5 Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.697 <sup>a</sup>	.486	.458	.64619

Predictors: (Constant), Opportunity Of Growth And Advancement , Suitable Working Condition , Superior Support , Compensation System

The given regression analysis model summary showed that there is a positive correlation between job satisfaction (0.697) and selected independent variables namely opportunity of

growth and advancement, suitable working condition, superior support and compensation system. It is also cleared that 49% of variation in job satisfaction is explained by selected four variables indicating there are other independent variables influencing job satisfaction.

Table Number 6 ANOVA<sup>a</sup> of Regression Analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.570	4	7.393	17.704	.000 <sup>b</sup>
	Residual	31.317	75	.418		
	Total	60.887	79			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Opportunity Of Growth And Advancement , Suitable Working Condition , Superior Support , Compensation System

The ANOVA table indicates that the overall

model is significant because p sig. value (0.000) is less than 0.05. And therefore, the model has achieved a satisfactory level of goodness of fit in predicting the variance of job satisfaction in relation to four factors.

Table Number 7 Regression Coefficients<sup>a</sup>

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	1.363	.442		3.086	.003
	Compensation System	.214	.109	.245	1.969	<b>.053</b>
	Suitable Working Condition	.107	.128	.080	.831	<b>.409</b>
	Superior Support	.223	.117	.228	1.902	<b>.061</b>
	Opportunity of Growth & Advancement	.235	.096	.282	2.451	<b>.017</b>

Dependent Variable: Job Satisfaction

If the sig. value p related to 't' statistic is less than 0.05, the null hypothesis is rejected and if the sig. value p related to 't' statistic is greater than 0.05, the null hypothesis is accepted.

The results showed that there is no significant impact of compensation system, suitable working condition and superior support on Job satisfaction as p value is more than 0.05 and therefore, the null hypothesis is accepted. While, there is a significant impact of opportunity of growth and advancement on Job Satisfaction because p value is less than 0.05 and hence, the null hypothesis is rejected.

Table Number 8 Level of Job Satisfaction

Level of Job Satisfaction	Count	Per cent
Highly Satisfied	27	33.75
Satisfied	33	41.25
Neither Satisfied nor Dissatisfied	17	21.25
Dissatisfied	02	2.5
Highly Dissatisfied	01	1.25
<b>Total</b>	<b>80</b>	<b>100</b>

It's been clear from the given table that there were 33.75 per cent of employees who were highly satisfied with their job while 41.25 per cent of them were just satisfied with the job. Surprisingly, 21.25 per cent of employees stood neutral while 1.25 per cent of them were found to be highly dissatisfied.

**Recommendations [Or] Suggestions:**

- The medical professionals, nurses and compounders should be motivated by incentivising their efforts.
- Flexible working hours should be implemented so as to adjust with hospital operations.
- Administration staffs should not be treated as medical professional and nurses.
- Lessons on Stress Management and Crisis management should be taught.
- Contractual or temporarily appointments should be avoided.
- Transportation and food should be arranged for those employees who do night / evening shift.
- They should be offered Over Time and leave adjustment if they come on duty on the particular occasion.

**Limitations and Scope for Future Research:**

This study was confined to only selected hospitals of Vadodara and 80 sample units considering the time and other constraints. As the researcher has conveniently collected data, the results may not be generalized. The prejudice and biasness of the respondents might have influenced their responses. The further study can be carried out by covering all types of hospitals of major cities of Gujarat. Similarly, job satisfaction of employees engaged in banking, telecom, tourism, IT industry can be studied.

**Conclusion:**

This empirical study has revealed the greater insights on job satisfaction among employees engaged in hospitals. The results indicate that opportunity of growth and advancement has significant impact on job satisfaction than other selected factors and majority of respondents were found to be satisfied with their job. The hospital management should strive for keeping their employees engaged and motivated by undertaking variety of measures such as flexible compensation plan and working hours, succession planning, off job training programme etc.

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Appendix I – Demographic Details of the Respondents

Age Group (years)	Count	Per cent
18-30	44	55.00
31-40	24	30.00
41-50	08	10.00
Above 50	04	05.00
<b>Gender</b>		
Male	35	43.75
Female	45	56.25
<b>Marital Status</b>		
Married	44	55.00
Unmarried	36	45.00
<b>Education</b>		
Below SSC	03	03.75
SSC	05	06.25
HSC	08	10.00
Diploma	31	38.75
Graduation	20	25.00
Post Graduation	12	15.00
Other	01	01.25
<b>Monthly Family Income (Rs.)</b>		
Below 10,000	13	16.25
10,000 – 20,000	20	25.00
21,000 – 40,000	26	32.50
More than 40,000	21	26.25
<b>Nature of Job</b>		
Permanent	37	46.25
Temporary	13	16.25
Contractual	30	37.50
Source: <i>Primary Data, compiled by the researcher</i>		

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## Tax Regime of E-Commerce Business under Goods and Services Tax Structure.

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### Abstract:

*The paradigm shift in policies and focus in taxation laws, both at micro and macro level, on compliance and plugging possibilities of evasion has made it imperative for the professionals to be abreast with latest developments. It is indeed a pleasure that Accountants in this competitive environment have carved a niche for themselves in the field of Service tax and to a good extent in VAT, in the last decade. The phenomenal increase in e-commerce transaction has widened the ambit of Indirect Taxes especially the statutory provisions provided under upcoming regime of GST. Knowledge of E-Commerce Models and legal framework is a pre-requisite to stand and/ or expand business and procure Foreign Direct Investment. This Study Paper on Taxation of E-Commerce has been specifically designed to provide in-depth knowledge of provisions pertaining to E-Commerce Transactions under GST regime and regulatory guidelines for foreign direct investment on e-commerce prevailing at this point of time, in a very practical and simplified manner.*

### Keywords:

Tax Regime, E-Commerce, Goods and Services Tax.

### Introduction

India has been witnessing an unprecedented growth in e-commerce transactions. It has now become imperative for the business to understand and adopt e-commerce to grow trade globally and economically. The Government has also been making swift changes in the taxation regime to tax the e-commerce transaction. States have been keen to capture information on goods coming in. Guarding of non-taxed goods entering the State is also a country wide concern. Hence, it is prerequisite for professional like Chartered Accountants to envisage and grab this opportunities in ecommerce and cope with the challenges by updating e-commerce transaction and the legal framework governing them.

### History and Growth of E-Commerce in India

1. In recent years e-commerce in India has managed to capture the eye-balls and also the mind-space of the consumers at large such as never before and with this unprecedented growth, India has become the second largest market for e-commerce.
2. India is adding three new internet users every second.
3. E-commerce companies have the potential of creating 12 million new jobs in the next 10 years.
4. The e-commerce market in India is expected to breach the \$100- billion mark by 2020.
5. To tap the opportunity, e-commerce companies are aggressively ramping up their technology.
6. In line with the ensuing GST law, companies like Snapdeal, Zomato, Urban-Clap, redBus and Cleartrip have started venturing into e-business in flight and bus ticket bookings, hotel reservations and food ordering, recharges and bill payments on theirs platform to augment their Gross Supply Volume.

7. E-commerce is still less than 2% of the overall consumption in India, as against 14% in China.
8. India can also take a leaf out of the example of Taobao village program in China created by Chinese internet giant Alibaba. From 20 such villages in 2013, the number has grown to 780 by 2015. These digital villages are spread over 17 provinces in China, and cover more than 2,00,000 active online shops. In India, more than 800 million people live in 640 lacs villages.
9. Over the last couple of years, India has changed the way it shops and trades. The unprecedented growth of the e-commerce sector has been largely driven by rapid technology adoption and access to the internet through broadband, 3G/ 4G etc., resulting into an increased online consumer base. Due to this digital revolution, the e-commerce sector in India has recorded a four-fold increase in its size in 2009. The industry is growing at a compound annual growth rate (CAGR) of more than 35%.
10. The explosive growth in the e-commerce sector has given rise to multiple tax issues. The e-commerce companies besides their normal challenges such as rising competition, rapidly changing technology, shrinking margins etc., are now facing litigation owing to their innovative business models.
11. The Business model of leading players in the e-commerce industry in India enables thousands of small and medium enterprises to reach customers across the country to market their products while the customers are assured timely delivery and genuine products at most competitive prices. E-commerce business model also supports the key policy initiatives of "Make in India" and "Digital India" of the government in addition to providing jobs to several thousands young people in urban, semi-urban and rural areas of the country. Further, e-commerce business is having a very strong and positive ripple effect on several other industries such as commercial vehicles, two-wheelers, mobile telephony and internet services, cash handling and management services etc.
12. The e-commerce market in India is expected to nearly double to Rs. 2,11,005/- crore by December 2016 and cross \$ 100 billion mark within next 5 years making significant contribution in GDP.
13. E-commerce gives a secure and cost-efficient contribution in the growth of SMEs and SMEs contribute 17% of the Nation's GDP and 40% in the total exports from the country.
14. E-commerce also provides and supports the thought process to encourage cashless transactions which will greatly help the Government's long term vision to curb black money.

### **Interpretation of E-Commerce Provisions as Contained in The Revised Model GST Law**

#### **Major Definitions [Section 2]**

#### **Definition of electronic commerce [Section 2(41)]**

Section 2(41) says that electronic commerce means supply of goods and/or services including digital products over digital or electronic network.

#### **Definition of electronic commerce operator [Section 2(42)]**

Section 2(42) says that electronic commerce operator means any person who owns, operates or manages digital or electronic facility or platform for electronic commerce.

#### **Levy of tax on e-commerce operator [Section 8(4)]**

Section 8(4) says that the Central or a State Government may, on the recommendation of the Council, by notification, specify categories of services the tax on which shall be paid by the electronic commerce operator if such services are supplied through it, and all the provisions

of this Act shall apply to such electronic commerce operator as if he is the person liable for paying the tax in relation to the supply of such services. The first proviso to section 8(4) says that where an electronic commerce operator does not have a physical presence in the taxable territory, any person representing such electronic commerce operator for any purpose in the taxable territory shall be liable to pay tax. The second proviso to section 8(4) says that where an electronic commerce operator does not have a physical presence in the taxable territory and also he does not have a representative in the said territory, such electronic commerce operator shall appoint a person in the taxable territory for the purpose of paying tax and such person shall be liable to pay tax. It is very important to note here is that the liability to pay service tax would be on the e-commerce operator only for the service provided through such operator and this is not for supply of goods through such operator, which will be out of this deemed levy on the operator. Further, it is also important to note that unlike in the existing service tax provision, where the e-commerce operator is made liable to pay service tax only in case where service is provided under the brand of the operator, whereas in the case of GST whether the service is provided under the own brand (say example Redbus, Make my trip) or under the brand of the operator (say example Uber or Ola) still the operator shall have to pay the applicable GST.

#### **Tax collected at source [Section 56]**

##### **Rate of tax to be collected [Section 56(1)]**

Section 56(1) says that in spite of anything to the contrary contained in the Act, every electronic commerce operator (say-operator), not being an agent, shall collect an amount calculated at the rate of one percent of the net value of taxable supplies made through it where the consideration with respect to such supplies is to be collected by the operator. An explanation to section 56(1) says that for the purposes of this subsection, the expression

“net value of taxable supplies” shall mean the aggregate value of taxable supplies of goods or services, other than services notified under section 8(4), made during any month by all registered taxable persons through the operator reduced by the aggregate value of taxable supplies returned to the suppliers during the said month. The exemption for making the collection of tax at source is as under(a) In case the services provided are notified under section 8(4) by which such operator is liable to pay service tax (b) If the operator is acting as an Agent (logistic provider) (c) In case the consideration has been paid directly by the recipient to the supplier [Cash on Delivery - (COD) transactions]. **Time limit for collection of tax [Section 56(2)]**

Section 56(2) says that the power to collect the amount specified in section 56(1) shall be without prejudice to any other mode of recovery from the operator. The amount collected under section 56(1) shall be paid to the account of the appropriate Government by the operator within ten days after the end of the month in which such collection is made in the manner as may be prescribed.

##### **Time limit for furnishing a statement [Section 56(3)]**

Section 56(3) says that every operator who collects the amount specified in section 56(1) shall furnish a statement, electronically, containing the details of outward supplies of goods or services effected through it, including the supplies of goods or services returned through it, and the amount collected under section 56(1) during a month, in such form and manner as may be prescribed, within ten days after the end of such month.

##### **Credit to be taken by supplier [Section 56(4)]**

Section 56(4) says that the supplier who has supplied the goods or services through the operator shall claim credit, in his electronic cash ledger, of the amount collected and reflected in the statement of the operator



furnished under section 56(3), in the manner prescribed.

#### **Matching of details [Section 56(5)]**

Section 56(5) says that the details of supplies furnished by every operator under section 56(3), shall, in the manner and within the period prescribed, be matched with the corresponding details of outward supplies furnished by the concerned supplier registered under the Act.

#### **Discrepancy communicated to both parties [Section 56(6)]**

Section 56(6) says that where the details of outward supplies furnished by the operator under section 56(3) do not match with the corresponding details furnished by the supplier under section 32, the discrepancy shall be communicated to both persons in the manner and within the time as may be prescribed.

#### **Consequences of non-rectification [Section 56(7)]**

Section 56(7) says that the amount in respect of which any discrepancy is communicated under section 56(6) and which is not rectified by the supplier in his valid return or the operator in his statement for the month in which discrepancy is communicated, shall be added to the output tax liability of the said supplier, where the value of outward supplies furnished by the operator is more than the value of outward supplies furnished by the supplier, in the manner as may be prescribed, in his return for the month succeeding the month in which the discrepancy is communicated.

#### **Tax liability for addition [Section 56(8)]**

Section 56(8) says that the concerned supplier, in whose output tax liability any amount has been added under section 56(7), shall be liable to pay the tax payable in respect of such supply along with interest, at the rate specified under section 45(1) on the amount so added from the date such tax was due till the date of its payment.

#### **Issuance of notice [Section 56(9)]**

Section 56(9) says that any authority not below the rank of Joint Commissioner may serve a notice, either before or during the course of any proceeding under this Act, requiring the operator to furnish such details relating to

- (a) Supplies of goods or services effected through such operator during any period, or
- (b) Stock of goods held by the suppliers making supplies through such operator in the godowns or warehouses, by whatever name called, managed by such operators and declared as additional places of business by such suppliers - as may be specified in the notice.

#### **Time limit for furnishing details after service of notice [Section 56(10)]**

Section 56(10) says that every operator on whom a notice has been served under section 56(9) shall furnish the required information within 15 working days of the date of service of such notice.

#### **Penalty for not furnishing details after service of notice [Section 56(11)]**

Section 56(11) says that any person who fails to furnish the information required by the notice served under section 56(9) shall, without prejudice to any action that is or may be taken under section 85, be liable to a penalty which may extend to Rs.25000/-.

An explanation to section 56 says that for the purposes of this section, the expression 'concerned supplier' shall mean the supplier of goods and/or services making supplies through the operator.

#### **Person liable to be registered (Schedule V)**

Paragraph 6 of Schedule V

Paragraph 6 of Schedule V says that in spite of anything contained in Paragraphs 1 and 3 above, the following categories of persons shall be required to be registered under this Act-

- (a) Persons who are required to collect tax under 56, whether or not separately registered under the Act. [Paragraph 6(vii)]

(b) Persons who supply goods and/or services, other than supplies specified under sub-section (4) of section 8, through such electronic commerce operator who is required to collect tax at source under section 56, irrespective of the threshold specified in Paragraph 1. [Paragraph 6(x)]

(c) Every electronic commerce operator, irrespective of the threshold specified in Paragraph 1. [Paragraph 6(xi)]

(d) Every person supplying online information and database access or retrieval services from a place outside India to a person in India, other than a registered taxable person. [Paragraph 6(xii)]

### **GST Rules applicable to E-commerce operator**

#### **Form and manner of submission of statement of supplies effected through e-Commerce [Rule 8]**

E-commerce operator to file FORM GSTR-8 [Rule 8(1)]

Rule 8(1) says that every e-commerce operator required to collect tax at source under section 56 shall furnish a statement in FORM GSTR-8 electronically through the Common Portal, either directly or from a Facilitation Centre, notified by the Board or Commissioner, containing details of supplies effected through such operator and the amount of tax collected as required under section 56(1).

### **Challenges to overcome**

#### **IT System preparedness by Industry**

The IT systems of all taxpayers will be re-defined before the relevant date of implementation of the ensuing GST law. It

is going to be a herculean task even for the I.T. companies since every tax payer will be requiring customization for its specific needs.

### **Credit Card Industry also faced the heat**

It may be noted that for the purposes of easing the burden of TDS compliance on large number of sellers of goods and services, the CBDT issued a Notification No. 56/ 2012 dated 31-Dec-2012, whereby the commission paid to banks on credit card and several other services were exempted from tax deduction. On the contrary, the law makers may bring in the TCS provisions so that the compliance burden may be shifted on the large e-commerce companies instead of the smaller goods and services suppliers.

### **The definition of e-commerce is heedlessly drafted**

The issue arises as to whether electronic network which may be as small as connecting two computers or as large as the internet would also be covered. Thus, the technicalities may entangle any agent working on behalf of a principal as an Electronic Commerce Operator. The definition of 'electronic commerce' is creating such a doubt. Therefore, the legislature may bring about clarity on the issue by inserting an explanation.

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## A Study to know impact of Outdoor Advertising on Customer Purchase Decision.

Mr. Rahil Patel & Ms. Kruti Bhatt

### Abstract:

*Outdoor advertisement is one of the important promotional techniques with perspective of marketing which lead customers to purchase a product or to avail service. This study is conducted to know the impact of outdoor advertisement on purchase decision of people in Surat city. Descriptive research design is used by the researcher for the study. Both Primary and secondary data were used. Questionnaires were filled by 200 samples. Samples were taken through non probability convenience sampling. It is found out that there is association between gender and impact of outdoor advertisement on purchase decision. It is also found that some of the criteria like celebrity, content, size of the billboard have impact on purchase decision.*

### Keywords:

Outdoor Advertising, Purchase Decision, Customer, Impact of outdoor advertising

### Introduction:

#### Foot Over Bridges (FOB)

Foot over bridges have become landmark in the city. They are specially constructed for pedestrians for crossing roads to avoid accidents. People have really appreciated it as they are located in the areas where there is heavy traffic.

#### Gantry

##### Overhead Panel for Branding

It is an overhead structure very attractive wherein you can create large and eye catchy designs to fascinate the audiences.

##### Kiosks

#### Repeated Exposure to Brand

It is one of the most predictable means of outdoor advertising. Pole Kiosks is being used and preferred by many of the advertisers for the promotions as it gives customers to think over the brand by repeated campaigns on the road. It is an option for those who has low budget yet want to do an effective campaign.

#### Bus Queue Shelters

##### Low Cost, Innovative, Attracts Target Audience

Bus Queue Shelters are for the commuters to stay safe against sun and rain which has now proved as another innovative tool to create awareness amongst the audiences. Companies can innovate their designs creatively and display on this shelters which again is an attractive way to promote their products apart from hoardings.

#### Bus Branding

**Bus advertising** is a medium commonly used

by advertisers to reach the public with their message. Usually, this takes the form of promoting commercial brands, but can also be used for public campaign messages.

### Mobile Vans

Special Area Coverage, Moveable according to Target Audience

Mobile Vans is again an effective branding tool wherein you can connect to all audience while moving across the city to promote your product. This has also been a successful branding option for many companies. Mobile vans attract audiences of all age groups and are compelled to have a long lasting impression in their mind. It is again a cost effective yet impactful medium for the advertisers for promotions.

### Below the Line (BTL) Activities

Emerging Advertising Wing

BTL activities give the marketer the ability to tailor their messaging in a more personal manner. BTL promotions are highly measurable giving marketers valuable insights into their return on investments. These insights can then be used to inform the next BTL communication to the audience and tailor the messaging based on the feedback received.

### LED Screen

For the advertisers to promote their products especially near mall areas. This is most effective and eye catchy tool for promotion.

### Literature Review:

**Davoud Sadeh, Mahmood Nooraie and Babak Hajikarimi (2013)** have conducted research on “**Billboard advertising optimization by using imperialist competitive algorithm (Case study: Tehran city)**”. The objective of research was undertakes the optimization of billboard media considering the existing factors such as costs, number of visits and the coverage. Researcher has used descriptive research and

experimental research the statistic population is the 22 areas of city Tehran 116 billboards were extracted. After analyzing researcher found that using the billboards which are not accurate or are out the standard can affect the reputation of a brand. Visual annoyance due to not considering the legal rules and necessities of billboard installation place can be generalized to the commercial name and logo of the product that is advertised at that place.

**Kamran Khan, Syed Karamatullah Hussainy, Abdullah Khan (2016)** have conducted research on “**Billboard Advertising and Customer Attention: A Pakistani Perspective**”. The objective of research was to investigate the significance of billboard advertising and there attributes, to explore the relationship between the customer attention and billboard messages and to examine that colorful billboards are effective or simple advertising. Researcher has used Primary data was collected personally with the help of questionnaire and collected this survey from respondents. A sample of 200 respondents comprising 103 male and 97 female was selected on the basis of Simple random sampling technique. To evaluate the hypotheses sample T-Test has been deployed. After analyzing researcher found that billboard advertising remains an effective tool for the marketers because of its vast reach and cost effectiveness. It is now evident through this research that Color & Size, Celebrity Image, Brand Image & Logo and Texture & Messages are the key fundamentals of any billboard advertising and have strong impact on the attention of a customer.

**Olga Borisova and Anna Martynova (2017)** have conducted research on “**Comparing the Effectiveness of Outdoor Advertising with Internet Advertising**”. The objective of research was to evaluate the effectiveness of outdoor advertising compared to the other marketing channel that the company used, which was internet marketing and qualitative

research is defined as collecting, ordering and analyzing. Descriptive research was used for this research. 15 respondents for conducting the survey for the research conducted within a company. After analyzing researcher found that the findings include the following, first, the Inetcom Company should adopt outdoor advertising as opposed to internet advertising. customers want to access the information at any time of the day, they would easily get it via posters, flyers and brochures.

**Donna M. Lithgow (1999)** has conducted research on “**The effective use of billboards as a communications tool**”. The objective of research was to identify guidelines for communicators to use as a reference when designing an outdoor campaign. Researcher has used secondary research for the study and used judgment sampling method. Surveys were sent to 58 agencies throughout the United States and Canada that received OBIE awards between 1994 and 1998. A total of 30 surveys was collected. The author attempted to find strict guidelines to follow when developing an outdoor campaign. The variety of responses prohibited the author from finding patterns in many of the answers. Respondents also followed the general rule of “less is more” when determining the number of elements in a billboard’s layout.

**Yulia Belinskaya (2015)** has conducted research on “**Outdoor Advertising and Gender Differences Factors Influencing Perception and Attitudes**”. The objective of research was to outdoor advertising and its perception in terms of gender differences. attitude towards outdoor advertising, its recall and its sexualized nature. The study was quantitative data for the first survey was collected during three weeks: 1-20 of June, 2015. Second survey was designed and implemented after the results of content-analysis were gained. Data was collected during the period 20th of June - 8th of July. Surveys were designed with the usage of Likert scale and the collected results were

tested afterwards with the help of Student t-test. After analyzing data it was found that the perception of outdoor advertising is complicated communicative process, that is still understudied, especially in terms of gender differences. gender differences do influence the perception, meaning the general attitude, the recall and, consequently, the purchase intent.

**Louis Perez (2011)** has conducted research on “**Visual and textual appeals in banner advertising: A Content analysis**”. The objective of study was to investigate textual and visual variables of banner advertisements and to analyzing banner advertisements from social media and social networking Websites, including YouTube and Facebook. The methodology was Ads analyzed in this analysis have been selected from two social media Websites, two social networking Websites, and an e-commerce site. Top 100 sites in the United States list that is updated daily, and these ratings are compiled using a “traffic rank” system . Chi-square tests were conducted. After analyzing researcher found that LinkedIn, a site focused on building business relationships and online personas to help people look for jobs, showed to have a majority of business oriented ads. Ad serving on Facebook is based on profile attributes including locations and interests. Amazon.com served a number of animated ads but some were simple image rotating ads while others had much more animation.

**Rama Mohan Rao Adinarayana Rao** have conducted research “**Impact of Advertisements on Consumer Decision Making Process**”. The objective of research to measure the impact of advertisements on consumer behavior and various stages in the purchase decision process of the consumers. Researcher has used primary data sources. An opinion survey was conducted in three major cities of Andhra Pradesh such as Hyderabad, Vijayawada and Visakhapatnam. A sample of 600 consumers was selected by using stratified

sampling technique. After analyzing researcher came to know they expect the consumers to respond positively to the stimulation given through the Advertisements. Thus the measurement of impact of advertisements is of vital significance to the companies. The consumers are satisfied with the quality of advertisements also.

**Rizwana iqbal, Sana batool (2016)** have conducted research on “**Impact of Billboard Advertisement on Customer Buying Behavior: A study on Islamia University of Bahawalpur**”. The objective of study was to analyzed Billboard advertisement affects consumer buying behavior and Catching billboard affects consumer buying behavior. A simple random selection technique is used in this study and sample size is 300 selected from IUB students. 259 questionnaire got back of which further analysis have been done to make the final conclusion. To check the sampling adequacy Kaiser-Meyer-Olkin test is applied and its value. After analyzing the data researcher came to know that billboards advertisement its rate to influence customers is higher relative to other media because it delivers information affordably, attract potential customer that all in turn enhances sales.

**Kara Chan (2011)** has conducted research on “**Awareness of outdoor advertising in Hong Kong**”. The objective of study was to know awareness of outdoor advertisements and audience perceptions of outdoor advertising. Researcher has used survey method and collected data through questioner. For interpretation 332 respondents was consider. After analyzing the data researcher found that advertising awareness in a natural and real outdoor setting in which busy streets in metropolitan city are used as platform for advertising. Open outdoor environment on busy streets is uniquely different from highways and captive environments. The respondents held positive perception of outdoor poster ads and reported that they would pay attention to

poster ads that were creative, vivid in color, or larger-than-life.

**Leo Edegoh, Ifeyinwa Nwanolue, Nkiru Ezeh (2013)** have conducted research on “**Audience Assessment of the Use of Models in Billboard Advertising: A Study of Consumers of Amstel Malt in Onitsha, Nigeria**”. The objective of research was to find out whether models in billboard advertising attract more attention to Themselves than product advertised. To determine what arouses the interest of the audience most in billboard advertising and to assess what influences action of audience in billboard advertising. The study adopted survey research method. The sample size for the study was 373 respondents purposively selected from Onitsha, the commercial nerve centre of Anambra State, Nigeria. The study used structured questionnaire as data gathering instrument. Data obtained was presented in frequency distribution tables. After analyzing researcher came to know about that the main purpose of billboard advertising is to create awareness of the existence of products, services, etc, particularly newly introduced goods or products, and new brand of existing products. Billboards influence consumers’ decision and increase sales.

**Israel Nyarko, Ernest Tsetse, Simon Avorgah (2015)** have conducted research on “**Is Billboard Advertising an Effective Tool in The Marketing of Home Appliances**”. The objective of research was to explore the effects of billboard advertisements of home appliances on customer purchasing decision. To identify the essence of billboard advertisement in the marketing of home appliances and to identify the effects of billboard ads on the decisions and choices of home appliance buyers. A total of Five Hundred respondents were chosen purposively for the study. Both qualitative and quantitative data were collected from respondents. The analysis of data was done with descriptive statistics in the form of simple frequency tables and bar graphs for easy

comprehension. After analyzing the researcher came to know study has actually shown that billboard advertising in the marketing of home appliances has been a major contributing factor towards the success of marketing electronic home appliances. It should be noted that even though billboard advertising plays a vital role in the operations of the company yet it does not function on its own. But rather, it also depends on the other elements of Integrated Marketing Communication like sales promotion.

**Heather Andrew (2013)** has conducted research on “**The impact of digital out of home advertising on people, places and purchases**”. The objective of research was to study looking at brain response to outdoor advertising, focusing in particular on the impact of premium outdoor digital sites. Researcher has used 115 respondents Data was collected from a number of areas of the brain, but the metrics that were primarily used for the analysis reflected the responses that hypothesized to be important in the effectiveness of out of home advertising. After analyzing the research hypothesis was that, in order to achieve great results, outdoor advertising needs to capture attention and then engage emotions, and so drive memory encoding and subsequent purchase behaviour. Digital sites are particularly effective, especially when movement is involved, and the best sites continue to have an impact beyond the initial viewing of them, in priming the brain to respond more positively to subsequent executions from the same advertising campaign, even when these are carried on more standard poster formats.

**Samar Fatima and Samreen Lodhi (2015)** have conducted research on “**Impact of Advertisement on Buying Behaviors of the consumers: Study of Cosmetic Industry in Karachi City.**” The objective of research was to identify the impact of advertisement on consumer awareness and to identify the role of advertisement on building consumer perception. Researcher has use quantitative

approach and the data was the primary data for gathered the users of cosmetics products in Karachi. A size of 200 respondents was taken under consideration. SPSS statistic tool was use to analyze the data. From this study researcher found that cosmetic companies should use attractive and informative content to create the awareness in the consumers and they should not rely on the advertisement for changing the perceptions of the consumers instead they should use new ways of sales promotion or other medium to change the perceptions of the people.

**Dr. Namita Srivastava (2017)** has conducted research on “**Advertisement influence and purchase decision of the consumers in India**”. The objective of research was to identify the impact of advertisement on consumer purchase decision and to develop the relationship between influence of advertisement and consumer buying decision. The research was quantitative research questionnaire was developed to gather the data from the respondents. Likert’s scale was used in the questionnaire. A survey was conducted in various places of lucknow city to gather the primary data from the respondents under study. A size of 31 respondents was taken under consideration. SPSS tool was used to investigate the data. Researcher found that Advertisements play an essential role in creating an image of a product in the minds of consumers. Advertisements must be catchy and communicate relevant information to consumers.

**Violeta Neza, Ervin Myftaraj (2016)** have conducted research on “**The influence of advertising in insurance companies in Albania and consumer decision making process**”.

The objective of research was to understand and measure the impact of advertising in the insurance market, To create the awareness for importance of the advertising for the industry and To understand and measure the impact of advertising on brand building, the need for

brand and finally choosing the plan, while buys it. Researcher has used The primary data are collected from a well structured questionnaire.200 respondents interview taken for this research. After analyzing researcher found that most preferred company is Sigal Uniqa insurance, followed by Sigma Interlbanian, Eurosig etc. From the survey can be interpreted that effective advertising have a major impact in the purchase decision making process of the customer, to whom advertising should be effective in order to leave a lasting impact in their minds and making correct decisions in purchasing insurance products.

**Research Methodology:**

**Research Objectives:**

To know the impact of outdoor advertising on the purchase decision of consumer.

To identify the association between Gender and the impact of outdoor advertising on Customer purchase decision.

Descriptive research design is used for the study, both primary and secondary data were used by the researcher. Primary data were collected through questionnaire from Surat city. 200 samples were taken by using non probability convenience sampling. Data were analyzed using SPSS software.

**Data Analysis:**

**One sample t test:**

(T value-2)

H0	HA	Significant Value	
Outdoor advertisement make people curious to purchase product purchase.	Outdoor advertisement don't make people curious to purchase product purchase.	0.949	Null Hypothesis is accepted
Celebrities in outdoor advertisement influence people to purchase product.	Celebrities in outdoor advertisement don't influence people to purchase product.	.000	Null Hypothesis is rejected.
Outdoor advertisement provide adequate information for purchase decision.	Outdoor advertisement don't provide adequate information for purchase decision.	.000	Null Hypothesis is rejected.
My purchases are more influenced by Outdoor advertisements.	My purchases are less influenced by Outdoor advertisements.	.000	Null Hypothesis is rejected.
Outdoor advertisement make people learn more about new fashion, trend and products that influence purchase decision.	Outdoor advertisement make people learn less about new fashion, trend and products that influence purchase decision.	.000	Null Hypothesis is rejected

**Chi square crosstab analysis:**

Ho = There is no association between gender and the impact of outdoor advertisement that make people curious to purchase product.

Ha = There is association between gender and the impact of outdoor advertisement that make



people curious to purchase product.

Crosstab				
	Gender			Total
		Male	Female	
Outdoor adv curiosity	Strongly Agree	56	25	81
	Agree	38	36	74
	Neutral	14	4	18
	Disagree	12	7	19
	Strongly Disagree	2	6	8
Total		122	78	200

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.675 <sup>a</sup>	4	.020
Likelihood Ratio	11.775	4	.019
Linear-by-Linear Association	2.197	1	.138
N of Valid Cases	200		

Here, Null Hypothesis is rejected as chi square value is less than 0.05. So, there is association between gender and the impact of outdoor advertisement that make people curious to purchase product.

**Findings:**

- People buy products based solely on outdoor advertising as per need and very few people buy products based solely on outdoor advertising.
- Majority of the people have purchased product recently after coming across the outdoor advertisement.
- Outdoor advertisement doesn't create much curiosity among people to purchase product.
- Celebrity's presences in outdoor advertisement make them less influenced on purchase decision for product.
- Outdoor advertisement provides information which is needed to purchase product.
- Outdoor advertisement makes people learn less about new fashion, trend and products that influence purchase decision.
- Mostly people purchase FMCG Products followed by beauty product and readymade garments by observing outdoor advertisement.
- To attract people for purchasing a product

celebrity image is much important followed by graphical presentation of product, brand name, content and size of billboard.

- There is association between gender and the impact of outdoor advertisement that make people curious to purchase product.

**Conclusion:**

From the study it can be concluded that people are aware about various types of outdoor advertisement media like billboard, digital hording, mobile van hoarding, fob, bus queue & shelters, kiosk and gantry. The study shows that outdoor advertising is effective to some extent in changing people's purchase decisions. The study also reveals that after watching outdoor advertising people buy FMCG products. Outdoor advertisement is having positive impact on customers' purchase decision.

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