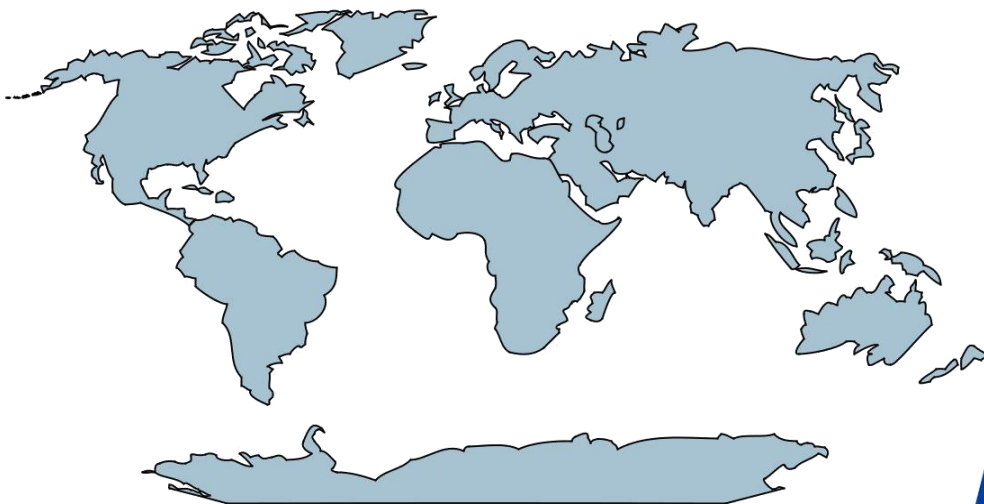


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# **INTERNATIONAL JOURNAL OF RESEARCH IN MANAGEMENT & SOCIAL SCIENCE**

**Conference Special**



**Volume 7, Issue 1 (II)**  
January - March 2019

# **INTERNATIONAL MULTI-DISCIPLINARY CONFERENCE**

**Theme**

**Policy Initiatives of Government of India -  
*Appraisal & Assessment***

**ORGANIZED BY  
VIDYALANKAR SCHOOL OF INFORMATION TECHNOLOGY  
MUMBAI**

**8<sup>th</sup> & 9<sup>th</sup> FEBRUARY, 2019**

**IN ASSOCIATION WITH**



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**Indian Academicians and Researcher's Association**

**VSIT** | Vidyalankar School of  
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**VIDYALANKAR SCHOOL OF INFORMATION TECHNOLOGY  
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Vidyalankar School of Information Technology (VSIT) is a part of Vidyalankar Dnyanpeeth Trust situated in Mumbai and is affiliated to the University of Mumbai. It was established in the year 2002. VSIT offers both graduate and post-graduate programmes in the subjects of Information Technology, Commerce and Management. It is a NAAC accredited college that aims to impart Quality Education in the field of Science, Commerce and Management. VSIT has tie-ups with renowned Foreign Universities like Penn State University, Rutgers University, California State University, University of Toledo, University of South Carolina and many more. The mission of the institute concerns the creation of an educational environment where students can reach their full potential in their chosen discipline and also a scholarly environment where the talents of both the faculty members and students are nurtured and used to create knowledge and technology for the benefit of the society. Fostered in the values expounded by the erudite founders C. S. Deshpande and Dr. Sanjeevani Deshpande and currently propelled under the able leadership of the zealous Vishwas Deshpande, VSIT is driven to set the highest standards in teaching and research.

## **ABOUT VCMT**

Academia is a fertile ground for germination of new ideas and innovation. Teaching is no longer the sole functional role of educators. Considerable academic efforts involve research and learning to enable educators to become facilitators and contributors to knowledge. Every academic circle aims to expand its creative and contributory capacity. VSIT conducts an annual national research conference named V-CMT, formerly known as VISMIT. The conference aims to inculcate the inclination towards and augment an educator's knowledge of their respective fields of expertise through research. It works to congregate ideas and to enable an understanding of new perspectives and paradigms not only for the teaching faculties of the institute but also for those from other institutes and the industry.

VSIT has been building its VCMT conference since last 5 years it's one of the fertile grounds for germination of new ideas and innovation keeping this in mind this year VCMT 2019 has been focussed on the theme "**Policy Initiatives of Government of India - Appraisal & Assessment**". The objective of the conference is measuring the impact of government initiatives and policies through its merit, worth and utility of the same implemented in various sectors. The conference will evaluate the policies the tracks Economic ,Social and Role of technology in implementation of policies.

This conference will bring together visionaries from different sectors to identify practical strategies and discuss the best practical approaches to build a strong developed nation .

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Indian Academicians and Researchers Association ( IARA ) is an educational and scientific research organization of Academicians, Research Scholars and practitioners responsible for sharing information about research activities, projects, conferences to its members. IARA offers an excellent opportunity for networking with other members and exchange knowledge. It also takes immense pride in its services offerings to undergraduate and graduate students. Students are provided opportunities to develop and clarify their research interests and skills as part of their preparation to become faculty members and researcher. Visit our website [www.iaaedu.com](http://www.iaaedu.com) for more details.

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# MESSAGES



## *Message from Principal*

Vidyalankar School of Information Technology (VSIT), a Commerce, IT and Management college affiliated to University of Mumbai, has always been organising activities pertaining to the current topics of interest to the academicians, industrialists, students and all other stakeholders of an education system. The theme of V-CMT 2019 - an international multi-disciplinary Conference - "Policy initiatives of Government of India - Appraisal and assessment" falls in the same tradition. India is going through a series of major policy initiatives in her journey towards becoming a world leader. Under this scenario, understanding and critically evaluating the policy initiatives is the most wanted exercise. V-CMT 2019 has encouraged a fair and free participation of scholars in this exercise. We have received many good research papers in various tracks. Even the students have expressed themselves through research papers on current issues. I take this opportunity to thank everyone who has contributed towards a fruitful organisation of the Conference.

**Dr. (Mrs.) Rohini Kelkar**

Principal

Vidyalankar School of Information Technology  
Mumbai



## *Message from Steering Committee Member*

The VSIT is arranging two-Day National Conference V-CMT 2019 on February 8-9, 2019. The theme chosen is “POLICY – INITIATIVES OF GOVT. OF INDIA – APPRAISAL AND ASSESSMENT”. The principal objectives of the Conference are – *A. To appraise and assess the various policy initiatives undertaken by the Government in Economic and Social spheres, and, B. To evaluate the implementation of technologies utilised in public policy.* The invited Expert Speakers and the Panellists will share their views and insights on specific themes related to Socio-Economic Policies. A better understanding of the implications of the Policy-framework currently operating in India, can be achieved in these three tracks through Experts-talks and Panel-Discussion. The conference also aims to encourage Teachers and Students to contribute research paper on these themes. VCMT-2019 has received an overwhelming response. Several papers were received from faculties as well as students. This volume puts together the selected papers which have been reviewed and edited by the committee. We sincerely hope that the contents of this volume proceeding will be of use and value to the teachers as well as students of Commerce, Management and Information Technology.

**Dr. Chandrahas Deshpande**

Adjunct Faculty, Commerce and Management  
Vidyalankar School of Information Technology  
Mumbai



## *Message from Steering Committee Member*

Over last few years, V-CMT has picked up different tracks in context of the theme of "Vision for the Next Decade". The focus of this year's theme is to critically look at the policies and initiatives taken by the government, their impact, the achievements and the obstacles. The tracks deal with various aspects that directly or indirectly impact the livelihood, improvement in business/lifestyle and the ease of carrying out our activities. Technology has been an integral part of the initiative roll-outs. Hence the third track deals with the technology initiatives and frameworks that support these policies. As part of this publishing, we bring you a blend of analysis of the current initiatives, their shortcomings and other alternatives to help us succeed in this endeavour. We hope this helps us take the next leap towards progress and success.

**Mr. Makarand Deshpande**

Adjunct Faculty, Information Technology  
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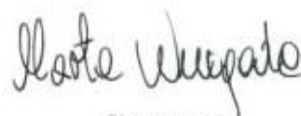
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**AN OVERVIEW: SMALL AND MEDIUM ENTERPRISES IN INDIAN ECONOMY****Prof. Pandurang Bhausaheb Akhade**Department of Accounting and Finance, KBP College Vashi, Navi Mumbai

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**ABSTRACT**

*Small and Medium Enterprises (SME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. SMEs not only play crucial role in providing large employment opportunities but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. SMEs also play a significant role in Nation's development through its high contribution in domestic production, significant export earnings, low investment requirements, operational flexibility, location wise mobility, low intensive imports, capacities to develop appropriate indigenous technology, import substitution, contribution towards defense production, technology-oriented industries, competitiveness in domestic and export markets thereby generating new entrepreneurs by providing knowledge, training and skill development.*

*In this research paper the researcher present the role of SMEs in Indian economy. The research reveals that, SMEs not only impacts GDP. It also helps to enhance the livelihood of people of the country by creating more economic opportunities. The research focuses on an overview of SMEs and its trends on economic growth of India.*

*Keywords: SMEs, Indian Economy, India, growth, GDP etc*

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**INTRODUCTION**

SMEs sector of India is considered as the backbone of economy contributing to 45% of the industrial output, 40% of India's exports, employing 60 million people, create 1.3 million jobs every year and produce more than 8000 quality products for the Indian and international markets. With approximately 30 million SMEs in India, 12 million people expected to join the workforce in next 3 years and the sector growing at a rate of 8% per year, Government of India is taking different measures so as to increase their competitiveness in the international market.

The current era is a revolutionary stage for small and medium enterprises that are mushrooming with a significant pace and speed at present. SMEs are joining the digital bandwagon in capturing and exploring more to itself on web. Whether it's about digital hiring or interacting consumers on social media, SMEs are making themselves digitally-driven.

**OBJECTIVE OF THE STUDY**

1. To know the concept of SMEs in Indian economy.
2. To study the role of SMEs in Indian economy.
3. To identify the trends in SMEs sector in Indian economy.
4. To know the various schemes launched by central government for SMEs.

**RESEARCH METHODOLOGY**

The present study is explanatory cum descriptive in nature.

Data collected from secondary data sources such as books, journal, and news paper and Government websites.

**LIMITATIONS OF STUDY**

1. Research is based on secondary data collection not primary data.
2. Geographical area for this research paper is limited to India only.

**What is Small & Medium Enterprises?**

**Definitions of Small & Medium Enterprises** In accordance with the provision of Small & Medium Enterprises Development (MSMED) Act, 2006 the Small and Medium Enterprises (MSME) are classified in two Classes:

**1. Manufacturing Enterprises**-he enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951) or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. The Manufacturing Enterprises are defined in terms of investment in Plant & Machinery.

**2. Service Enterprises:-**The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment.

SMEs are companies whose turnover falls below certain limits.

<b>Manufacturing Enterprises – Investment in Plant &amp; Machinery</b>	
<b>Description</b>	<b>INR</b>
Small Enterprises	Above Rs.25lakhs and up to Rs.5 crores
Medium Enterprises	Above Rs.5crores and up to Rs.10 crores
<b>Service Enterprises – Investment in Equipment</b>	
<b>Description</b>	<b>INR</b>
Small Enterprises	Above Rs.10lakhs and up to Rs.2crores
Medium Enterprises	Above Rs.2crores and up to Rs.5crores

Source: MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES, GOI

## **ROLE OF SMES**

SMEs are one of the key drivers behind this growth story of Indian Economy. This sector, comprising of manufacturing, infrastructure, service industry, food processing, packaging, chemicals, and IT, has emerged as the most vibrant and dynamic engine of growth of Indian economy over the past few decades.

These self-funded proprietary firms, private co-operatives, private self-help groups, Khadi, and Village and Coir industries not only provide huge employment opportunities but also ensure regional balance by taking industrialization to rural and backward areas about 20% of MSMEs operate out of rural & backward areas. Up to year 2017, 425 lakhs number of SMEs established in India (registered and unregistered) and 95% of the total industrial units in the country. Next to agriculture sector the 10.6 cores people means 40% India's workforce working in this sector. In Indian economy SMEs are produces more than 6000 products and SMEs manufacturing output approx. 45% of the total Indian manufacturing output. Around 6.12 % GDP contribution from the manufacturing sector and 24.52 % GDP contribution from the service sector.SMEs exports 40% of the total Indian exports and now days approx.1, 471,912.92crore fixed asset laid down in SMEs sector. SMEs sector has continuously maintained average growth rate over 10%.

## **TRENDS IN SMES SECTOR IN INDIAN ECONOMY**

### **1. SMEs focused B2B ecommerce**

The advent of advanced technology is opening newer channels for businesses across several sectors. This is particularly true for B2B ecommerce firms focused on the Indian SME sector. Until now, the presence of innovative technological platforms is bringing on board a rising number of small players including the neighborhood local store. This is a win-win situation for all involved enabling smoother transactions, procurement of raw materials and industrial goods, and forging a better connection between established brands and small shop owners.

### **2. Amalgamation of E-commerce & M-commerce**

Digital transformation is no longer a fancy term vis a vis Indian SME courtesy faster penetration of Internet. When this is coupled with extensive usage of smart phones which are becoming more and more affordable, Indian SMEs are experiencing simultaneous adoption of web as well as mobile based technology.

### **3. Improving SME lending with growth in FinTech firms**

A major constraint in the growth of the SME sector has been non-availability of easy finance. Not all small and medium enterprises find favor with traditional banks when it comes to lending courtesy lack of experience, absence of collaterals and infrastructure, poor financials, and small ticket size. Given their significant online presence, several modern fin Tech players are making it convenient for the SMEs to receive loans. The year 2017 will experience a surge in NBFCs with special focus on offering customized loan solutions on online platforms.

### **4. Government initiatives, a major boost**

The SME sector, acknowledged as the backbone of the India economy, is further expected to contribute significantly to India's growing GDP. The sector will inevitably support India to improve nation's financial inclusion and mitigate the urban rural divide. Also, it is expected that by 2020, India will have the largest job ready, youth population in the world and with favorable business ecosystem in the manufacturing sector it will not only generate employment of significant level but also become hot bed of entrepreneurial activities.

**Central Government Schemes for SMEs****1. Credit Guarantee Fund Trust for Micro & Small Enterprises (CGTMSE).**

To make available collateral free credit facility to new and existing Micro & small businesses subject to a limit of Rs.100 lakh per unit. In which 2015-16 350056 Application approved with guarantee coverage of Rs.14, 673crore(Performance during 2015-16) and 2160975 Application approved with coverage of Rs.103,864crore (up to 31<sup>st</sup> dec.2017)

**2. Export Promotion of Capital Goods (EPCG).**

To allow import of capital goods on zero duty subject to meeting export obligations. Number of authorization 22544 with FOB value of Rs.78,860crore and duty savings of Rs.12619 crore(Performance during 2015-16) & Number of authorization 13,585 with FOB value of Rs.50,359crore and duty savings of Rs.8,668 crore (till October 2016).

**3. Credit Linked Capital Subsidy Scheme (CLCSS).**

To enable beneficiary enterprises to avail institutional credit towards the purchase of machinery and technologies & 3,142 benefited units with an expenditure of Rs.203.76 crore (2015-16) and 22,380 benefited units with an expenditure of Rs. 1349.63 crore (up to 31/12/2015).

**4. Lean Manufacturing (National Manufacturing Competitiveness Programme).**

To accessible of various Lean Manufacturing techniques to SMEs and thus, improve their manufacturing competitiveness. It Benefits to 670 units with an expenditure of Rs.11.26 crore (up to 31/12/2015) & Benefits to 3041 units with an expenditure of Rs.45.26 crore.

**5. Intellectual Property Rights.**

The Awareness programs held-26, Workshops-05, and IPR Facilitation Centre-03. (up to 31/12/2015) The Expenditure of Rs.1.73 crore. Awareness programs held-308, Workshops-95, and IPR Facilitation Centre-31. Expenditure Rs.13.69 crore.

**CONCLUSION**

It is concluded that the SMEs Sector has contributed significantly to the GDP and also played vital role in creation of jobs and exports. An Indian economy is expected to grow by over 8% per annum until 2020. SMEs contributes about one-sixth of total GDP of India. Government is trying to push it forward with a number of plans to foster technology, innovation and quality in SMEs. Central government of India provides 25 to 35 schemes for SMEs sector. Indian SMEs are increasingly organizing themselves in clusters, which improve their access to business associations are technical assistance providers. It also helps in building inter-firm cooperation that adds to productivity and innovation. The clusters already account for 40% of the overall industrial output and 35% of direct exports of nation. The efficacy of clustering in SME space will further increase in future as clusters continue to leverage benefits of spatial proximity.

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**ETHICS IN FINANCE, FINANCIAL GLOBALIZATION AND STAKEHOLDER RESPONSIBILITY:  
NEW CONCEPT OF CORPORATE FINANCE****Rahul Chauhan**Assistant Professor, Parul Institute of Business Administration, Parul University, Baroda

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**ABSTRACT**

*This article deals with the foundation of financial theory into corporate finance. Using analysis and synthesis scientific methods, and especially with the requirements for the successful application of these methods, in this article is not only review the financial literature but also it is shown the future approach of the expected financial paradigm. The aim of the paper is to describe and review financial theories in terms of classical, modern and actual approach; but also it is described the future approach of corporate finance in terms of financial function to establish the evolution and the cultural situation that affects the financial theories. This financial paradigm integrates ethics in finance, financial globalization, ICTs and stakeholder responsibility. The main result of this paper shows that it is necessary to take into consideration into financial paradigm aspects relate to the ethics, and concern to broad stakeholders interests to improve the efficiency of corporate finance that carry out the common good of the society.*

*Keywords: Descriptive, Ethics in Finance, Financial Theories, Corporate Finance, Internationalization, Stakeholder.*

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**1. INTRODUCTION**

The evolution of financial economics has led to a dichotomy between financial market and corporate finance. This differentiation is interesting not only because their intrinsic character, but also because of the interrelation that maintain both approaches, especially until 50s. This point will be the basic area in which this article is framed.

Corporate Finance or Financial Economy and Financial Market or Corporate Financial Economics are the two perspectives of Financial Economics, as a whole. The first reflects the financial decisions that business managers take in order to achieve efficiency of financial management in the company. The second is referenced by those investors' behaviours in the market. In corporate finance, the financial decision impact into the corporate value and it is influenced by manager corporate decisions in terms of the fact that they decide to uptake, distribute and allocate financial resources, always under the control of the corporate governance. So corporate finance has gained importance in terms of business valuation, and this impact is translated into value creation (Azofra, 2005, Brennan, 1995; Flórez, 2008, Miller, 2000; Zingales, 1998). Then, in this line the finance function could be considered as a description of resources and financial means to have it on the generation and adding value to the company as a whole (Ross et al., 2005). However, financial market's theories focus on consumer choice and investment portfolios and asset pricing models, are usually under theories of efficient markets.

**2. REVIEW OF LITERATURE: FROM CLASSICAL TO ACTUAL APPROACH OF CORPORATE FINANCE**

The financial economy in parallel with the evolution and development of firms and markets has changed substantially as a separate discipline from the 20s century. They are historical events which have defined economic development. Therefore, in order to improve the understanding about how the financial economy has evolved and in order to appreciate the changes that have a relation with the responsibilities and functions of corporate finance, we have developed a chronological analysis to show financial economics' scope based on the financial theories.

In its origins Financial Economic has focuses on the description of mergers and acquisitions (Dewing, 1914). In this era, known as *classical* period it is studied the financial area in a descriptive way; investments are made because of technical reasons and companies exclusively linked the investment to profitability, as funding was secured. The two major events of the time, the Great Depression and the World War, cause a change in the focus that concentrates in the bankruptcy, corporate reorganization, corporate liquidity, capital budgeting, financing and regulation of markets values in a context characterized by the failure in business and markets. At this time the company is the apex of all financial explanation.

**2.1. CLASSICAL APPROACH**

The beginnings of financial economics as an autonomous discipline coincide with economic events that occurred in the United States in the late nineteenth and early twentieth century. And, in particular with the

emergence of large corporations that come after industrial development, expansion and increased competitiveness in the market due to railway line. In this context, financial studies focused on the description of the media and financial institutions, through which companies got their money, especially in the long-term as well as the causes of failure and business reorganization processes for adapt to new conditions in the economic environment. Investment decisions were not given attention, since, at that time, the problems that arose from the asset were minimal.

One of the pioneers in studying financial economics, Arthur S. Dewing, published his key research that lays the foundation of finance in that time, called "Traditional View of Finance" (Gomez-Bezares, 2005). Dewing's work, a Finance Professor at Harvard, "Corporate Promotions and Reorganizations", written in 1914 reflects the facts that gave rise to reorganisations and mergers resulted in concentrations during the first decade of this century. One of the more relevance evidence and cause of the failure of certain companies was their inadequate financial structure.

## **2.2. MODERN APPROACH**

Similar to the development of Economy was the Companies situation; the modern approach of the financial function is originated after Second World War. Continuing, period in which there is a strong economy expansion in the occidental World. Moreover, the technological changes led the diversification of companies, motivated by the different level of technology of companies' production structures.

Returning to the economic and financial situation of that time, in the half of fifties there were a strong economic expansion. The economic development after the war was impulse by technological advances, because of that new industries production emerged. This situation causes at the end of 50s or beginning of 60s a hard competence which impact negatively in the reduction of corporate profits. The greatest diversity of business opportunities in terms of their profitability, and the lack of financial resources as a result of financial constraints, highlighted the financial function relate to the proper allocation of scarce financial resources and the search for profitable investment alternatives.

## **2.3. ACTUAL APPROACH**

After the economic expansion of 50s and 60s, the 70s started a severe economic crisis in the Western world, with a dramatic increase in prices of raw materials, especially oil after the oil crisis of 1973. It had an impact on the general price index and high levels of inflation hardly predictable, recessions and restrictive government measures on economic activity. The main function of finance was to optimize the risk-return relationship.

The 70s was considered as the most productive decade in terms of research about financial concepts; specifically, in the mid-70s at the time coinciding with the publication in the Journal of Financial Economics from the work of Jensen & Meckling (1976) about agency theory. It produces a change in financial area and principally in terms of corporate finance or, as some financial experts prefer to say organizational finances significantly increased compared to the previous period (Azofra, 2005; Brealey et al., 2007; Mascareñas, 1999; Tirole, 2006, among others). Azofra argues (2005), for example, that the most important contributions of research conducted over the past twenty-five years of the last century are part of the scope of the agency paradigm and, with the help of it, "lived their organizational finances golden age during the 80's" (Azofra, 2005: 125).

## **3. THE FINANCIAL FUNCTION IN CORPORATE FINANCE: THE RESULTS FROM CLASSICAL TO ACTUAL APPROACH.**

Economic fluctuations and the scientific and technical development have allowed to the finance function evolves from a descriptive to an analytic perspective that focuses on the study and development of financial instruments and techniques leading to complex financial models designed to respond to business reality in each of the period. In this table it is established a summary about the new conceptions of the finance function. In actual period the financial resources of the company were managed for not only active but also predictive way, which requires anticipation of the variables that will influence financial decisions, although the models are made at this time using historical data which ends with minimal chance of anticipation of facts not previously occurred. The risk variable is introduced to make financial decisions both long and short term, and others such as profitability or liquidity were also incorporated.

## **4. METHODOLOGY**

In general, analysis is defined as the procedure by which we break down an intellectual or substantial whole into parts or components. Synthesis is defined as the opposite procedure: to combine separate elements or components in order to form a coherent whole (Soldevilla, 1988).



Then, in this paper considered into Economy discipline we have used analytical-synthetical method because only through the decomposition of the phenomenon in its basic variables and generalizing their assumptions become the knowledge into law (San-Jose, 2012). In addition, we have considered that the economy, as a science, is intended to make predictions that can be made only when there is sufficient capacity available synthesis or common sense adequate to reach the ultimate knowledge of the causes of an economic phenomenon. The experience, study and support of financial experts have led to these results.

### **I. Predicting the Future Approach of Corporate Finance: the New Financial Paradigm**

Since 1990 various crises have occurred throughout the planet (Caprio & Klingebiel, 1997). Principally, because of the economic globalization, the financial crises are not isolated (Beim, 2001; Detragiache & Ho, 2010). The finances during this last stage seek to create value by operating new investment schemes, financial leverage and even methods and techniques to avoid creating toxic assets (Urionabarrenetxea & Rodriguez, 2010).

The study carried out by Santos et al. (2007) is very important in this sense because it is identified the aspects linked to theories that are booming in this discipline (agency theory, corporate governance, business ethics and stakeholder theory) by reviewing the financial textbooks. The aim is to extract in an explorative way what the current financial paradigm is highlighted in the basis of the financial literature. In addition, Santos et al. (2007) also analyzed the business approach, objective, in which the books have been framed, to identify if they conform to the development of finance.

#### **5.1. ETHICS IN FINANCE**

It is now possible to maintain in the financial economy the dichotomy between being and should be, because much of the financial decisions involve not only the means but also the ends. Likewise, the previous valid judgments of corporate finance experts may affect the results; therefore business ethics should be integrated into the discipline of financial economics analysis (Fernandez, 2004). However, finances are often considered free of "ethics charges" (Anbalagan, 2011: 60); one reason could be the thin line that is given to the relationship between finance and law. Within the financial paradigm tend to define that this rational agent is individualistic, materialistic and competitive (Dobson, 1997). In this context, finance has been reduced to the mathematical function of maximizing shareholder wealth; assumptions that are required for solid mathematical models (Anbalagan, 2011).

The integrated risk management in business and behavioural finance are specific areas of finance that require analysis from ethics. In financial theories, such as that of Modigliani & Miller, and the Valuation of financial stocks CAPM the main risk is systemic one, and this has minimized the need to manage the specific risk, and thus the impact that business decisions have on employees and other stakeholders that are greatly affected by that risk. However, currently in finance has appreciated the importance of managing risk, both systemic and specific in order to create value in the company by creating value for all stakeholders, not just shareholders. Thus, financial theories must evolve in this direction in order to reliably represent the company's financial reality.

In short, the lack of explanatory power through the theories of the firm and promote purely financial theories explaining financial events from ethical discipline. Currently the areas where ethics arouse greater interest in finance are the following ones (Anbalagan, 2011):

- Creative accounting, revenue management and financial analysis misleading.
- The insider trading, securities fraud and manipulation of financial markets.
- The executive compensation: concerns excessive payments made to company CEOs and senior management.
- Bribery, bribery and facilitation payments: while these may be in the interests (short-term) of the company and its shareholders, these practices may be anti-competitive or may violate the values of society.

#### **5.2. FINANCIAL GLOBALIZATION**

In the late XIX century international finance had a great development with the consolidation of the union of industrial capital with bank capital and society system institutionalization (Hilferding, 1985). But until the last decade of the XX century it has not culminated the evolution of financial globalization, based on the increase in global relations through transnational financial flows (Prasad et al., 2003). This process has originated the development of the international financial system supported by liberalization policies, regulation of national and international markets, the expansion of multinational corporations and the advancement of information and communication technologies.

The globalization has influenced the business size and organizational complexity; and currently larger economic and legal structures are more complex (Ross et al., 2005). Corporate finance is changed, partly because of the phenomenon of financial globalization because the financial integration has affected and developed them substantially.

### **5.3. NEW INFORMATION AND COMMUNICATION TECHNOLOGIES IN FINANCE**

ICTs have become an engine of economic development, and thus of the financial economy (Weston & Brigham, 1994). According to Badawy (2009) there is now a new way of thinking about finances throughout the ICTs evolution.

The effects of ICT are improvements in productivity growth and economic growth at the firm level (Brynjolfsson & Hitt, 2000; Oliner & Sichel, 2000). The traditional management of the company evolves towards managing people and processes in which the use of digital tools and the Internet is essential (Mackenzie, 2010). The new business model is based on digital communication methods in which the functions of the company, among them also the financial function needs and requires the evolution of ICT. In this context, the technologies should be considered as tools that have promoted the change of the company's financial function. This variable has led the way to do finance, not only in terms of how to manage the funds and financial instruments, but also creating new technology needs to which we must respond from electronic financial management.

### **5.4. STAKEHOLDER RESPONSIBILITY AND CORPORATE GOVERNANCE**

In recent years, our understanding of corporate governance has been enriched by new insights into the problem that the evolution of the company has brought. As a result, "the government's approach from the perspective of shareholders (shareholder model), conservation-oriented financial capital, has ceded its dominance in corporate finance to approach the problem from the perspective of all stakeholders (stakeholder model), focused on organizational capital preservation "(Azofra, 2005: 133).

The vision of the problem stems from government redefining the notion of ownership, value creation is a result of the synergies that occur between the different factors of production, as in the positive agency theory. The stakeholder approach is based on the shareholders are not the only residual claimants of incomplete contracts (San-Jose & Retolaza, 2012). Thus, the property is defined both by residual decision rights as the appropriation of residual income, so that those stakeholders who are assigned a residual power of decision to better exploit their personal knowledge, become partially owners (Hart, 1995, Hart & Moore, 1990).

## **6. SUMMARY AND CONCLUDING REMARKS**

This paper provides an in-depth description of the most important financial theories during the classical, modern and actual approach. Moreover, it is shown not only the actual approach in corporate finance but also, it is established the future approach. The used view is the financial function because in this way it is useful for decision-making into corporate finance. Then, this theoretical paper supported by their approaches reinforce the roots of a new understanding of the corporate financial theory of nowadays that involve the moral decisions taking into considerations the stakeholders' interests.

The most important contributions of this paper are twofold; firstly there is a scientific contribution because this different form to develop the corporate finance allowing for not only the efficiency as operational but also with the moral and ethical point improves financial strategically success of corporations. Secondly, the corporate finance in which the stakeholders value creation is taking into consideration permit the understanding of the firm in line with the integration into the governance and decision making of all of the interested agents that results into common good in terms of corporate finance not only because of higher financial performance, but also because social performance, as well. This paper involves the developing corporate finance future approach with ethical, global, technological and considering all of the stakeholder interests. It will be considerable into the management and strategy of companies to achieve the common good of all of them.

The main limitation of this work is that we have studied the corporate finance from a theoretical view. The robustness of this view is based on the option that it brings to achieve empirical results that will permit the corporate financial modeling integrating the explained aspects ethic, globalization, technologies and stakeholder interests that will result into the improvement of companies' performance, financial and social ones. In future works, other theories that may influence the corporate finance view, such as behavioral finance based on experimentation the financial institution theories, moral hazard theories and so on should be in-depth included in the analysis. The implementation view shows also, the necessary development of corporate financial tools that permit financial managers the identification and management of stakeholder interests bearing in mind the

ethical issues in finance. Finally, a future possible research line will be the development of a tool in which the relationship between the ethics in finance and financial market are integrated.

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**A STUDY OF FRAUDS IN THE BANKS****Shri Ramsagar Yadav**Assistant Professor, Department of Mathematics, Statistics and Computers, L. S. Raheja College of Arts and Commerce, Santacruz (W), Mumbai

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**ABSTRACT**

*Banks are the engines that drive the operations in the financial sector, money markets and growth of an economy. With the rapidly growing banking industry in India, frauds in banks are also increasing very fast, and fraudsters have started using innovative methods. As part of the study, a questionnaire-based survey was conducted in 2012-13 among 345 bank employees "to know their perception towards bank frauds and evaluate the factors that influence the degree of their compliance level." The study revealed that "there are poor employment practices and lack of effective training; over-burdened staff, weak internal control systems, and low compliance levels on the part of Bank Managers, Offices and Clerks. Although banks cannot be 100% secure against unknown threats, a certain level of preparedness can go a long way in countering fraud risk. Internal audit professionals should play an integral role in their organization"s fraud-fighting efforts.*

*Keywords: Bank frauds, India, developing economy, RBI, internal controls, use of technology*

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**INTRODUCTION**

It is universally accepted that for the smooth functioning of a money market and economic growth of a country, an efficient and good banking system is a must. According to Singh (2005), "The Indian banking industry is unique and has no parallels in the banking history of any country in the world. After independence, the banking sector has passed through three stages: character-based lending to ideology-based lending to competitiveness-based lending." Similarly, Kumar and Sriganga (2014) stated, "Banking sector of India accommodates 1175,149 employees, with total of 109,811 branches in India (and 171 branches abroad), and manages an aggregate deposit of Rs. 67,504.54 billion and bank credit of Rs. 52,604.59 billion."

**THEORETICAL FRAMEWORK****What is Fraud?**

The Institute of Internal Auditors „International Professional Practices Framework“ (2009) defines fraud as, "Any illegal act characterized by deceit, concealment, or violation of trust. Frauds are perpetuated by parties to obtain money, property or services; to avoid payment, or loss of services; or to secure personal or business advantage." It should be noted that frauds generally impacts a bank by causing financial, operational or psychological loss.

**RBI GUIDELINES FOR FRAUD CASES**

The RBI, being the central bank and an overall regulator of the Indian banking industry, has laid down in detail the policy guidelines, and procedures to follow for detection, investigation, taking legal action; as well as, prevention and reporting of various types of bank frauds. It is a well-known fact, that in a large majority of fraud cases, banks do not follow the guidelines prescribed by the central bank. As part of their routine, the central bank takes various pro-active steps to control frauds in banks.

**MAGNITUDE OF FRAUD IN THE INDIAN BANKING INDUSTRY**

According to Ernst & Young Report (E&Y 2012), "Different types of frauds caused Rs. 6,600 crore loss to the Indian economy in 2011-12, and banks were the most common victims in swindling cases; insider enabled fraud accounted for 61% of fraud cases." However, Soni and Soni (2013) concluded that "cyber fraud in the banking industry has emerged as a big problem and a cause of worry for this sector."

**LITERATURE REVIEW**

As per the survey conducted by Ganesh and Raghurama (2008), about 80 executive from Corporation Bank and Karnataka Bank of India. "Respondents were requested to rate their subordinates in terms of development of their skills before and after they underwent certain commonly delivered training programs." Responses revealed that for the 17 skills identified, there was improvement in the skills statistically. Moreover, another study to investigate the reasons for bank frauds and implementation of preventive security controls in Indian banking industry was performed by Khanna and Arora (2009). The study "seeks to evaluate the various causes that are responsible for bank frauds. The result indicate that lack of training, overburdened staff, competition, low compliance level are the main reasons for bank frauds."

**RESEARCH METHOD**

The present study is both descriptive and analytical in nature. As part of the study, a questionnaire-based survey was conducted among 345 bank employees. It comprised of several questions that attempted to know the opinions of bank employees regarding training received, attitude towards the procedures prescribed by RBI, awareness level towards frauds and their compliance level under the six heads. All the respondents were selected through the random sampling method. The sampled employees comprising of Managers, Officers and Clerks of the branches were given the questionnaire by personally visiting them in bank. Out of all the employees, 296 employees responded, with an overall response rate of 85%. In all, there were 57 managers, 130 officers and 109 clerks as respondents.

**RESEARCH FINDINGS**

The RBI has developed many important guidelines for prevention of bank frauds, which can help banks to prevent frauds. The compliance level of these security controls were measured under the following six heads—internal checks, deposit accounts, administration of check books and passbooks, loans and advances, drafts, internal accounts and inter branch accounts. The results of this study indicate that the security control measures are not fully complied with.

**Table (1): Average Compliance Scores of Various Heads of Bank Officers**

	Loans and advances	Deposit account	Admin. in check, pass book	Draft section	Internal & inter-branch account
Compliance score	65%	75%	60%	81%	86%

Table 1 provides a snapshot of average compliance scores of Bank Officers under the various heads. The compliance level of Officers is the “highest” in internal & inter-branch account (86%), followed by draft section (81%) and deposit account (75%). Surprisingly, Bank Officers gave the lowest scores to the following two areas viz., loans and advances (65%), and administration in check and pass book (60%) sections. Keeping in view the Bank Managers and Officers scores, we can draw a broad conclusion: nobody likes to perform the work especially in the administration of check and pass book section.” Thus, there appears to be considerable differences in compliance level of employees of various banks, most probably, on account of differences in the organizational culture, training provided, past experiences and their mental attitudes to strictly follow the RBI procedures. As part of research, 8 hypotheses were made and later tested.

**Table (2): Frequency Distribution of the Responses of Bank Employees on the basis of their Attitude towards RBI Procedures**

Attitude towards RBI procedures	Favorable	Moderate	Unfavorable	Total
Total number of employees	85	98	113	296

From Table 2, we can conclude that “the compliance level of the managers (48%) is higher than that of officers (22%). This may be due to the fact that managers are more rigorously trained and their attitude towards RBI’s procedures is more favorable than that of officers and clerks. Hence, Managers awareness level is high as they have increased level of responsibility.

**Table (3): Distribution of Managers and Officers according to their Compliance Level**

Position	High	Medium	Low
Manager	48	42	10
Officer	22	53	25

It is amply clear from Table 3 the awareness level is very low, both on the part of Clerks and Officers in Banks. For example, only 9.17% of clerks and 13.07% of officers belong to “high” category of awareness level. However, Managers show a little better awareness level. For example, around 15.78% of Managers belong to high category of awareness level. A careful study of the data contained in the table reveals shockingly that about 52% of Clerks, 49% of Officers, and 47% of Managers belong to “low” category of awareness level. It is very disappointing to know that the awareness level of Bank employees about various types of frauds and losses suffered by the banks are very low.

**Table (4): Hypotheses Testing**

No	Null-Hypotheses	Test Statistics	Calculated Value*	Accept/Reject
1	There will be no significant difference in the	Chi square test	39.791	Rejected

	compliance level of employees of various banks.		(16 dof)	
2	There will be no significant relationship between training status of employees and their level of compliance.	Chi square test	64.205 (16 dof)	Rejected
3	There will be no significant relationship between attitude towards RBI procedure of the employees and their compliance level.	Chi square test	32.215 (16 DOF)	Rejected

\*Critical value of chi-square at 5% level of significance at 4 degree of freedom is 9.49.

\*Critical value of chi-square at 5% level of significance at 16 degree of freedom is 26.3.

\*Critical value of chi-square at 5% level of significance is 1.96.

It is widely accepted that any dishonest employee in a bank can commit frauds without being noticed and caught. The method used by such employees is based on his imagination and past experience. The total number of bank employees in India against whom the action has been taken for their involvement in cases of bank frauds during 2002, 2003 and 2004 were 5459, 5237 and 4311, respectively.

**CONCLUSION**

In March 2015, the RBI has “established Central Fraud Registry by sharing information about unscrupulous over the sharp rise in cases of fraud and corruption in the Indian banking sector. Recently, in April 2015, RBI Chief Mr. Rajan has written to “the PMO seeking action in the country’s 10 biggest bank frauds involving prominent real-estate, media, and diamond firms that are being probed by the CBI” (Baruah, 2015). So, what should banks do to safeguard the interests of its customers? According to Chakrabarty, Deputy Governor of the RBI, (2013), “Banks should strengthen their reporting system, quickly report fraud cases, and fix staff accountability. There is urgent need for sharing practices of fraudsters and methods used by such criminals.”

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**IMPACT OF GOVERNMENT INITIATIVES ON SOCIAL MEDIA****Anoushka Mirgnani and Rinkesh Chheda**

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**ABSTRACT**

*Media has touched every part of a development process, there is no sector in an economy which is not influenced by the use of either of source of media. Thus we can say media plays a very important part in one's life at both personal and professional level. This paper highlights how the social media has emerged over a period of time, what were the drawbacks of social media because of which the government had to intervene, how government made its policies to protect the interest of social media users, interdependency of media and government. Thus we can say excess of anything good or bad is harmful.*

*Keywords: Social media, interdependency of media and government, rules and regulations, image building, regulatory authorities, values in using social media.*

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**NEED OF THE STUDY**

- Knowing about rules and regulation of social media will help people to use social media correctly.
- Ethics plays very important role in every field, this paper highlights the ethics required in using social media.

**OBJECTIVE OF THE STUDY**

- To understand the interdependence of media and government.
- To study the importance of rules and regulation in media industry.
- To understand the functioning of regulatory bodies with reference to media industry.

**INTRODUCTION**

The Indian Media and Entertainment (M&E) industry is a sunrise sector for the economy and is making high growth strides. Proving its resilience to the world, the Indian M&E industry is on the cusp of a strong phase of growth, backed by rising consumer demand and improving advertising revenues. The industry has been largely driven by increasing digitization and higher internet usage over the last decade. Internet has almost become a mainstream media for entertainment for most of the people.

The Indian advertising industry is projected to be the second fastest growing advertising market in Asia after China. At present, advertising revenue accounts for around 0.38 per cent of India's gross domestic product.

**SOCIAL MEDIA**

Social Networking Social Networking is an online service that enables its users to create virtual networks with likeminded people akin to social networks in real life. It often offers the facilities such as chat, instant messaging, photo sharing, updates, etc. Currently, social networking sites are the most prominent version of social media. Face Book with 800 million users is one of the most well-known social networking sites.

**TYPES OF SOCIAL MEDIA**

Kaplan and Heinlein in 2010 classified social media into six different types: collaborative projects, blogs and micro blogs, content communities, social networking sites, virtual game worlds, and virtual social worlds. A brief description of some of the most common types of social media is given below:

- Blogs are descriptive content pages created and maintained by individual users and may contain text, photos and links to other web sites. The main interactive feature of Blogs is the ability of readers to leave comments and the comment trail can be followed.
  - Micro-blogs are similar to Blogs with a typical restriction of 140 characters or less, which allows users to write and share content. Twitter is the most well-known micro blogging site. Vlogs and Video Sharing sites Video Blogs or Vlogs are blogging sites that mainly use video as the main form of content supported by text. YouTube is the largest video sharing site.
  - Wikis A Wiki is a collaborative website that allows multiple users to create and update pages on particular or interlinked subjects.
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**VALUES TO USE SOCIAL MEDIA**

- Identity: Always identify clearly who you are, what is your role in the department and publish in the first person. Disclaimer may be used when appropriate
- Authority: Do not comment and respond unless authorized to do so especially in the matters that are sub-judice, draft legislations or relating to other individuals
- Relevance: Comment on issues relevant to your area and make relevant and pertinent comments. This will make conversation productive and help take it to its logical conclusion
- Professionalism: Be Polite, Be Discrete and Be Respectful to all and do not make personal comments for or against any individuals or agencies. Also, professional discussions should not be politicized
- Openness: Be open to comments – whether positive or negative. It is NOT necessary to respond to each and every comment
- Compliance: Be compliant to relevant rules and regulations. Do not infringe upon IPR, copyright of others
- Privacy: Do not reveal personal information about other individuals as well as do not publish your own private and personal details unless you wish for them to be made public to be used by others.

**NEED FOR SOCIAL MEDIA GUIDELINES**

Given its characteristics to potentially give “voice to all”, immediate outreach and 24\*7 engagement, Social Media offers a unique opportunity to governments to engage with their stakeholders especially citizens in real time to make policy making citizen centric. Many governments across the world as well many government agencies in India are using various social media platforms to reach out to citizens, businesses and experts to seek inputs into policy making, get feedback on service delivery, create community based programmes etc. However, many apprehensions remain including, but not limited to issues related to authorization to speak on behalf of department/agency, technologies and platform to be used for communication, scope of engagement, creating synergies between different channels of communication, compliance with existing legislations etc.

**REGULATORY BODIES**

Major Regulatory Agencies Throughout the 20th century, three important U.S. regulatory agencies appeared. Under the auspices of the federal government, these agencies—the FTC, the Federal Radio Commission (FRC), and the FCC—have shaped American media and their interactions with both the government and audiences.

**FEDERAL TRADE COMMISSION**

The first stirrings of the FTC date from 1903, when President Theodore Roosevelt created the Bureau of Corporations to investigate the practices of increasingly larger American businesses. In time, authorities determined that an agency with more sweeping powers was necessary. Founded on September 26, 1914, the FTC came into being when President Woodrow Wilson signed the FTC Act into law, creating an agency designed to “prevent unfair methods of competition in commerce (Federal Trade Commission).” From the beginning, the FTC absorbed the work and staff of the Bureau of Corporations, operating in a similar manner, but with additional regulatory authorization. In the words of the FTC, Like the Bureau of Corporations, the FTC could conduct investigations, gather information, and publish reports. The early Commission reported on export trade, resale price maintenance, and other general issues, as well as meat packing and other specific industries. Unlike the Bureau, though, the Commission could challenge “unfair methods of competition” under Section 5 of the FTC Act, and it could enforce more specific prohibitions against certain price discriminations, vertical arrangements, interlocking directorships, and stock acquisitions (Federal Trade Commission).

Although its primary focus was on the prevention of anticompetitive business practices, in its early years, the FTC also provided oversight on wartime economic practices. During World War I, for example, President Wilson frequently turned to the FTC for advice on exports and trading with foreign nations, resulting in the Trading with the Enemy Act, which restricted trade with countries in conflict with the United States.

**FEDERAL RADIO COMMISSION**

First established with the passage of the Radio Act of 1927, the FRC was intended to “bring order to the chaotic situation that developed as a result of the breakdown of earlier wireless acts passed during the formative years of wireless radio communication (Messere).” The FRC comprised five employees who were authorized to grant and deny broadcasting licenses and assign frequency ranges and power levels to each radio station

**FEDERAL COMMUNICATIONS COMMISSION**

Since its creation by the Communications Act in 1934, the FCC has been “charged with regulating interstate and international communications by radio, television, wire, satellite and cable (Federal Communications

Commission).” Part of the New Deal—President Franklin D. Roosevelt’s Great Depression—era suite of federal programs and agencies—the commission worked to establish “a rapid, efficient, Nation-wide, and world-wide wire and radio communication service (Museum of Broadcast Communications).”

The responsibilities of the FCC are broad, and throughout its long history the agency has enforced several laws that regulate media. A selection of these laws include the 1941 National TV Ownership Rule, which states that a broadcaster cannot own television stations that reach more than 35 percent of the nation’s homes; the 1970 Radio/TV Cross-Ownership Restriction, which prohibits a broadcaster from owning a radio station and a TV station in the same market; and the 1975 Newspaper/Broadcast Cross-Ownership Prohibition, which discourages ownership of a newspaper and a TV station in the same market (PBS, 2004).

### **GOVERNMENT INITIATIVES**

The Telecom Regulatory Authority of India (TRAI) is set to approach the Ministry of Information and Broadcasting, Government of India, with a request to fastrack the recommendations on broadcasting, in an attempt to boost reforms in the broadcasting sector. The Government of India has agreed to set up the National Centre of Excellence for Animation, Gaming, Visual Effects and Comics industry in Mumbai. The Indian and Canadian Government have signed an audio visual co-production deal to enable producers from both the countries exchange and explore their culture and creativity, respectively.

The Government of India has supported Media and Entertainment industry’s growth by taking various initiatives such as digitizing the cable distribution sector to attract greater institutional funding, increasing FDI limit from 74 per cent to 100 per cent in cable and DTH satellite platforms, and granting industry status to the film industry for easy access to institutional finance.

### **DEPENDENCY OF GOVERNMENT ON MEDIA**

- Enhancing democratic representation.
- Developing early warning indicators of problems in critical public services and infrastructure such as health, law enforcement and transport.
- Providing new insights into intractable social problems.
- Challenging evidence between the research and policy communities.
- Information sharing and collaboration at all levels of government, particularly the front line.
- Knowledge sharing amongst public service users, reducing demand on the public sector.
- Improving public service delivery, particularly at a local level
- Developing highly effective public information campaigns based on accurate and localized understanding of views and behaviors.
- A check against ideologically driven policy.

### **RECENT DEVELOPMENTS AND INVESTMENTS**

The Foreign Direct Investment (FDI) inflows in the Information and Broadcasting (I&B) sector (including Print Media) in the period April 2000 – June 2018 stood at US\$ 7.17 billion, as per data released by Department of Industrial Policy and Promotion (DIPP).

- As of September 2018, Twitter announced video content collaboration with 12 Indian partners for video highlights and lives streaming of sports, entertainment and news.
- As of August 2018, PVR Ltd acquired SPI Cinema for worth US\$ 94.42 million.
- In H12018, 5 private equity investments deals were recorded of worth US\$ 115 million.
- The Indian digital advertising industry is expected to grow at a Compound Annual Growth Rate (CAGR) of 32 per cent to reach Rs 18,986 crore (US\$ 2.93 billion) by 2020, backed by affordable data and rising smartphone penetration.
- India is one of the top five markets for the media, content and technology agency Wavemaker where it services clients like Hero MotoCorp, Paytm, IPL and Myntra among others
- After bagging media rights of Indian Premier League (IPL), Star India has also won broadcast and digital rights for New Zealand Cricket upto April 2020.

- The government is finalising a policy which is aimed at keeping a hawk's eye vigil on the social media to check if it is being "misused" to conspire against India and spread anti-nationalpropaganda.

**CHALLENGES IN USING SOCIAL MEDIA**

a) Why to use social media: Departments sometimes find it difficult to define the need or objective to use social media. Is it for providing information, seeking feedback, generic interaction, etc. Due to this lack of clarity, departments often either choose not to use social media or attempt to be present on all platforms at once.

b) Which Platforms to use: Given the plethora of platforms and even types of social media, it is very difficult to choose the type and no. of platform on which to engage and how to create inter-linkages between these platforms.

c) Who will engage: Most departments have limited capacity to engage with traditional media itself and since social media demands a deeper and constant interaction, availability of such resources is even more limited. A closely associated question is that of authority i.e. who is authorized to respond on behalf of the department, whether such a response will be made in personal or official capacity and from personal or official account etc.

d) How to engage: Use of social media is an ongoing process and requires long term commitment. Many have questions around rules of engagement – how to create and manage an account, what should be response time, what are the legal implications etc. In order to help departments and government agencies to meet these challenges, Guidelines for use of Social Media have been drafted. In the following section, various elements of the Framework and the Guidelines to use the different elements of Framework have been detailed.

**CONCLUSION**

The ways in which online social media and communications technologies change information consumption and creation as well as human relationships and connections have important implications for education. Both students and educators can benefit greatly from harnessing the power social media and other communications technologies to become more educated and informed citizens of an increasingly interdependent world. In order to take advantage of these great benefits however, all of those involved in education must keep an open mind that allows for new definitions of how, when, where and with whom learning takes place. It goes without saying that with new technology usually come pitfalls and challenges. Ultimately however, the more humans are able to use new types of technology to collaborate, exchange and collectively create knowledge, the more value is added to our lives and the more opportunities we have to form part of a global community of compassionate lifelong learners.

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**A STUDY OF MEDIA POLICIES AND REGULATION**

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**INTRODUCTION**

Media are the public means of mass communication, especially the press, radio and television, also including film and recorded music as well as a number of new means of spreading by way of satellite and cable etc. Now-a-days Internet is also regarded as a 'mass medium' in its own right on the grounds of gradual diffusion to majorities in many countries both entertainment and information. From the point of view of regulation, the boundary between public and private communication is an important one, internet serves as a means of personal communication as well as means of dissemination and form of publication.

Regulation refers to the whole process of control or guidance, by established rules and procedures, applied by governments and other political and administrative authorities to all kinds of media activities. A regulation is always a potential intervention in ongoing activities, usually for some stated 'public interest' goals, but also to serve the needs of the market for instance, by supporting competition or for reasons of technical efficiency for instance, setting technical standards. Regulation takes many forms, ranging from clauses in national constitutions and laws to administrative procedures and technical specifications. Regulation can be internal as well as external. In the former case, we are usually speaking of 'self – regulation', where internal controls are applied, sometimes in response to public pressure or criticism from outside.

Today's times, media and technology mingling, and the rise of social media, brings about its own set off tangent dimensions. Like paid news, fake news, breach of privacy, etc., making media's role more responsible and in the favour of public interest, while upholding values of truth, law and code of conduct.

**METHODS OF REGULATION**

Methods of Regulation ranges from broadcast media, to print to social media, viz, the Cable TV Networks (Regulation) Act 1995, bringing Programme Code and Advertising Code. The Ministry of Information and Broadcast, issues Policy Guidelines for Uplinking.

1. The protection of public order and support for instruments of government and justice.
2. The protection of individual and sectional rights and interests that might be harmed by unrestricted use of public means of communication.
3. The promotion of the efficiency and development of the communication system, by way of technical innovation, standardization, connectivity and universal provision.
4. The promotion of access, freedom to communicate, diversity and universal provision as well as securing communicative and cultural ends chosen by the people for themselves.
5. Maintaining conditions for effective operation of free markets in media services, especially competition and access, stimulating innovation and expansion, as well as protection of consumers,

**MEDIA POLICY AND POLICY MAKING**

Media policies organize goals and means of action in relation to the media in general, to one media sector or some problematic issue (e.g. media concentration or transnational media flow) and the policy-making process normally involves the expression of conflicting interests. The main struggles over communication policy involve the following oppositions:

- A. public versus private interests;
- B. economic versus social or cultural interests;
- C. international versus national or local interests.

A policy can also be considered as a consistent rationale of thinking and action related to particular goals. The most relevant kinds of logic for media policy and regulation are as follows:

1. political - based mainly on partisanship
2. administrative - reflecting organisational efficiency
3. commercial - refers to profitability

4. industrial - related to broader national economic strategies
5. cultural - depending on a choice of values, for instance relating to language, nation, ethnicity, community, gender; and
6. technical operating efficiency and technology innovation

These terms reflect the different roles and perspectives which are brought to bear on a particular issue.

	<b>MORE FORMAL</b>	<b>LESS FORMAL</b>
<b>STRUCTURE:</b>	Provisions of media laws. Channel operating conditions. Cross-ownership rules. Rules about owners (religion, politics, nationality, suitability).	Political party policy. Industry pressure.
<b>INFRASTRUCTURE:</b>	Technical standards. Transmitter/satellite/cable ownership rules.	International agreements. Industry standards.
<b>DISTRIBUTION:</b>	Universal coverage requirements. Receiver license regulations. Hours of broadcasting.	Regional and local variations.
<b>ACCESS:</b>	Political party airtime. Minority access. Government access.	Fairness, neutrality and balance rules. Local community service.
<b>CONDUCT:</b>	Copyright and performance dues. Rules and mechanisms of accountability.	Rules for advertising and performance.
<b>CONTENT:</b>	Laws concerning pornography, violence, racism, etc. Content quotas (type and origin).	Producer codes for sex, violence, etc.

**CONCLUSION**

Media regulation is inevitably in tension with freedom of expression and of economic activity. Media regulation of some form is unavoidable because public communications media fulfil a wide range of essential functions in a modern society. Different types of media are still regulated according to different models of control, mainly relating to technology, but there is a trend for these separate models to converge, along with the underlying technologies (especially because of digitalization). In the study of regulation, we need to distinguish between levels of analysis, with particular reference to: theory/philosophy; policy projects; specific rules and regulations and self-regulation. Media regulation is subject to strong influence from local and national aspects of history, culture and circumstance, but the pressures of commerce and globalization are leading to a reduction of differences.

Regulations and control is applicable in different ways to media structure, organizational conduct and actual performance (i.e. the content and service provided). Present media regulation is having to adapt to the pressures of globalization, market liberalization as well as the emergence of new technologies. The general attitude towards policy-making in global communications takes little account of normative issues in the field of ethics and human rights. In general, the trend is towards less regulation. The internet poses new challenges to regulatory projects because of its lack of a clear national location, its loose forms of control, elusive technology and multiple functions. Its position is very ambiguous.

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**ECONOMIC POLICIES OF CAPITAL MARKET**

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**ABSTRACT**

*In present global competitive economic circumstances no country in the world is self-sufficient and self-reliance. The present review article is an attempt by the researchers to make a descriptive as well as analytical study of work done in the field of Indian capital market. This study will be focusing on various loopholes in the Indian Financial System. As capital market is a wider concept, lots of noteworthy contributions have been made in this area. In this write up emphasis are given to bring to light all the hard work done by various researches and to uncover the gap for future research. Apart from that the researchers have also highlighted some of the important reforms in Indian Capital Market since 1991 onwards. The application of multiple regression model shows that the capital market in India has the potential of contributing to the economic growth of the country. This is as a result of high market capitalization and relatively high market liquidity. Thus, the market organizations and regulations should be such that large number of domestic as well as foreign investors enters the market with huge listings, investments, and trading so that the very objective of optimal allocation of economic resources for the sustainable growth of the country can be ensured.*

*Keywords: Economic Growth, Economic integration, Sectorial Growth, India Capital Market, Market Efficiency, Market liquidity and sustainable growth.*

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**1. INTRODUCTION**

The capital market is the market for securities, where companies and governments can raise long term funds. Selling stock and selling bonds are two ways to generate capital and long term funds. It provides a new avenue to corporate and government to raise funds for long term. Capital markets expand the investment options available in the country, which attracts portfolio investments from abroad. Domestic savings are also facilitated by the availability of additional investment options. This enables to bridge the gap between investment and savings and paves the way for economic development. Capital market in any country provides the corporate and government to raise long term finance at a low cost as compared to other modes of raising finance Therefore capital market is important, more so for India as it embarks on the path of becoming a developed country and provides an avenue for investors to park their surplus funds. Capital market provides the investors both domestic as well as foreign, various instruments to invest their surplus funds. Not only it provides an avenue to park surplus funds but it also helps the investors to reap decent rewards on their investment. This realization has resulted in increased investments in capital market both from domestic as well as foreign investors in Indian capital market. Since last few decades the importance of the capital market as an efficient channel of financial intermediation has been well recognized by the researchers, academicians, and policy makers as a primary determinant of the economic growth of a country, both developed and developing. Some evidence from cross-country studies supports the view that efficient financial intermediation is crucial to economic development and positively influences growth

The capital market plays a very important role in promoting economic growth through the mobilization of long-term savings and the savings get invested in the economy for productive purpose. The capital market in India is a well-integrated structure and its components include stock exchanges, developed banks investment trusts, insurance corporations and provident fund organization. It caters to the varied needs for capital of agriculture, industrial and trading sectors of the economy. There are two important operations carried on in these markets. The raising the new capital and Trading in the securities already issued by the companies. The capital market deals with capital. Capital Market is generally understood as a market for long term funds and investments in long term instruments available in this market. Capital markets mean the market for all the financial instruments, short term and long term as so commercial industrial and government paper. Economic growth in a modern economy hinges on an efficient financial sector that pools domestic savings and mobilizes foreign capital for productive investments. Underdeveloped or poorly functioning capital markets typically are illiquid and expensive which deters foreign investors. Furthermore, illiquid and high transactions costs also hinder the capital raising efforts of larger domestic enterprises and may push them to foreign markets.

The capital market is the market for securities, where companies and governments can raise long term funds. Selling stock and selling bonds are two ways to generate capital and long term funds. It provides a new avenue to corporate and government to raise funds for long term. Capital markets expand the investment options available in the country, which attracts portfolio investments from abroad. Domestic savings are also facilitated

by the availability of additional investment options. This enables to bridge the gap between investment and savings and paves the way for economic development. Capital market in any country provides the corporate and government to raise long term finance at a low cost as compared to other modes of raising finance. Therefore capital market is important, more so for India as it embarks on the path of becoming a developed country and provides an avenue for investors to park their surplus funds. Capital market provides the investors both domestic as well as foreign, various instruments to invest their surplus funds. Not only it provides an avenue to park surplus funds but it also helps the investors to reap decent rewards on their investment. This realization has resulted in increased investments in capital market both from domestic as well as foreign investors in Indian capital market.

Due to the swiftness of economic reforms followed in India, the role of Capital Market has grown during last decade or so. Corporate both in the private sector as well as in the public sector raise thousands of crores of rupees in these markets. The governments, through Reserve Bank of India, as well as financial institutes also raise a lot of money from these markets. The capital market serves a very useful purpose by pooling the savings. The capital markets encourage capital formation in the country. The capital markets mobilize savings of the households and of the industrial concerns. Such savings are then invested for productive purposes. Capital markets also facilitate the growth of the industrial sector, as well as the other sectors of the economy. The capital markets provide funds for the projects in backward areas. Thus, Capital markets generate employment in the country.

## **2. REFORMS IN CAPITAL MARKET OF INDIA**

The major reforms undertaken in capital market of India includes:-

### **1) Establishment of SEBI**

The Securities and Exchange Board of India (SEBI) was setup in 1988 and was legalized in 1992. The primary function of SEBI is to regulate the activities of the merchant banks, to control the operations of mutual funds, to work as a promoter of the stock exchange activities and to act as a regulatory authority of new issue activities of companies. The SEBI was set up with the fundamental objective, "to protect the interest of investors in securities market and for matters connected therewith or incidental thereto."

### **2) Establishment of Creditors Rating Agencies**

Three creditors rating agencies viz The Credit Rating Information Services of India Limited (CRISIL - 1988), the Investment Information and Credit Rating Agency of India Limited (ICRA-1991) and Credit Analysis and Research Limited (CARE) were set up in order to assess the financial health of different financial institutions and agencies related to the stock market activities. It is a guide for the investors also in evaluating the risk of their investments.

### **3) Increasing of Merchant Banking Activities**

Many Indian and foreign commercial banks have set up their merchant banking divisions in the last few years. These divisions provide financial services such as underwriting facilities, issue organizing, consultancy services, etc. It has proved as a helping hand to factors related to the capital market.

### **4) Candid Performance of Indian Economy**

In the last few years, Indian economy is growing at a good speed. It has attracted a huge inflow of Foreign Institutional Investments (FII). The massive entry of FIIs in the Indian capital market has given good appreciation for the Indian investors in recent times. Similarly many new companies are emerging on the horizon of the Indian capital market to raise capital for their expansions.

### **5) Rising Electronic Transactions**

Due to technological development in the last few years, the physical transaction with more paperwork is reduced. Now paperless transactions are increasing at a rapid rate. It saves money, time and energy of investors. Thus it has made investing safer and hassle free encouraging more people to join the capital market.

### **6) Growing Mutual Fund Industry**

The growing of mutual funds in India has certainly helped the capital market to grow. Public sector banks, foreign banks, financial institutions and joint mutual funds between the Indian and foreign firms have launched many new funds. A big diversification in terms of schemes, maturity, etc. has taken place in mutual funds in India. It has given a wide choice for the common investors to enter the capital market.



**7) Growing Stock Exchanges**

The numbers of various Stock Exchanges in India are increasing. Initially the **BSE** was the main Exchange, but now after the setting up of the NSE and the OTCEI, stock exchanges have spread across the country. Recently a new Inter-connected Stock Exchange of India has joined the existing stock exchanges.

**8) Investor's Protection**

Under the purview of the SEBI the Central Government of India has set up the Investors Education and Protection Fund (IEPF) in 2001. It works in educating and guiding investors. It tries to protect the interest of the small investors from frauds and malpractices in the capital market.

**9) Growth of Derivative Transactions**

Since June 2000, the NSE has introduced the derivatives trading in the equities. In November 2001 it also introduced the future and options transactions. These innovative products have given variety for the investment leading to the expansion of the capital market.

**10) Insurance Sector Reforms**

Indian insurance sector has also witnessed massive reforms in last few years. The Insurance Regulatory and Development Authority (IRDA) were set up in 2000. It paved the entry of the private insurance firms in India. As many insurance companies invest their money in the capital market, it has expanded.

**11) Commodity Trading**

Along with the trading of ordinary securities, the trading in commodities is also recently encouraged. The Multi Commodity Exchange (MCX) is set up. The volume of such transactions is growing at a splendid rate. Apart from these reforms the setting up of Clearing Corporation of India Limited (CCIL), Venture Funds, etc., have resulted into the tremendous growth of Indian capital market. SEBI vide its press release PR No.59/2010 dated March 6, 2010 has announced the decisions of the board meeting of SEBI held on the same day.

**3. OBJECTIVES OF THE STUDY**

- To gain insight into the Indian capital market.
- To analyse the effect of economic reforms on Indian Capital Market.
- To provide suggestive measures for future prospectus.

**4. INDIAN CAPITAL MARKET : AN OVERVIEW**

The development of the capital market in India dates back to the eighteenth century when East India Company securities were traded in the country. In 1850s, the trading was limited to a dozen brokers and their trading place was under a banyan tree in front of the Town Hall in Bombay. The location of trading changed many times, as the number of brokers constantly increased. The group eventually moved to Dalal Street in 1874 and in 1875 became an official organization known as 'The Native Share & Stock Brokers Association'. In 1895, this association acquired a premise in the Dalal Street and it was inaugurated in 1899. Thus, the Stock exchange at Bombay was consolidated. And, the orderly growth of the capital market in India began. The Bombay stock exchange got recognition in May 1927 under the Bombay Securities Contracts Control Act, 1925. The constitution of India came into being on 26th January, 1950. The constitution put the stock exchanges and the forward markets under the exclusive authority of the Government of India.

**5. LITERATURE REVIEW**

Subir Gokarn (1996) in his research paper "Indian Capital Market Reforms, 1992-96 An Assessment" has used a conceptual framework that draws on the theory of regulation on the one hand and the new political economy on the other to make an assessment of the wide-ranging reforms that have been initiated in the Indian stock market over the past four years. Based on the framework the various reforms are classified into categories reflecting their regulatory effectiveness and/or their impact on sources of market failure. The researcher arrives at a generally positive assessment of the reforms, but points out three areas of concern: the lack of a fixed term appointment for the regulators; the persistence of non-competitive conditions in the market; and the excessive entry of new scripts into the market. Although in recent days, some steps have been taken to address this problem as well.

In a more recent study, Ewah et al (2009) appraise the impact of the capital market efficiency on the economic growth of Nigeria using time series data from 1961 to 2004. The study found that the capital market in Nigeria has the potential of growth inducing, but it has not contributed meaningfully to the economic growth of Nigeria because of low market capitalization, low absorptive capitalization, illiquidity, misappropriation of funds among others..

Anand Pandey (2003) in his thesis entitled “Efficiency of Indian Stock Market” made an analysis of three popular stock indices to test the efficiency level and random walk nature of Indian equity market. The study presented the evidence for inefficient form of Indian market. Autocorrelation analysis and runs test concluded that the series of stock indices in India are biased random time series.

**Kumar Bharath & Sampath Sangu (2012)** through their research paper entitled “**Corporate Governance and Capital Markets: A Theoretical Framework**” has outline a conceptual framework of the relationship between relationship between corporate governance and two important determinants of capital market development namely, a firm’s access to finance, and its financial performance. The framework assumes that a firm’s corporate governance is simultaneously determined by a group of related governance components and other firm characteristics. In this study an attempt is made to know how organisations are fair in corporate governance and capital market. It was explained that firm-level corporate governance quality can enhance both the firm’s ability to gain access to finance and its financial performance, which eventually lead to capital market development.

## **6. RESEARCH METHODOLOGY**

This is a qualitative study. The investigators here collected data from different secondary sources like research journals, various government organizations, books, websites etc. The study in this paper is based on review of Secondary Data.

## **7. CONCLUSION**

The researchers has also analyzed that India’s financial market is multi-facet but not balanced. Further it has been stated that the Indian capital market in the recent year has undergone a lot of innovation in term regulation and mode of operation. India needs innovative financial instrument in its domestic capital market. Financial Innovation must aim value addition in existing technologies, risk management practices, credit system, process, and products. As per the analysis of the researchers there is positive correlation between finance and economic growth. Thus, economic development is relatively impossible without quality innovation in financial market. The researcher has also added that the creation of a deep and vigorous debt capital mechanism is the key to financing infrastructure companies by allowing them to raise long term debt. At last the researchers have concluded with this fact that emerging economies like India have an advantage of learning from the mistakes of others. The application of multiple regression model shows that the capital market in India has the potential of contributing to the economic growth of the country. This is as a result of high market capitalization and relatively high market liquidity. Thus, the market organizations and regulations should be such that large number of domestic as well as foreign investors enters the market with huge listings, investments, and trading so that the very objective of optimal allocation of economic resources for the sustainable growth of the country can be ensured.

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**IMPACT OF INSOLVENCY AND BANKRUPTCY CODE, 2016 ON INSOLVENCY RESOLUTION PROCESS****Agnus Anthony Meledath and Swapna Kadam**Assistant Professor, Department of Commerce and Management, Vidyalankar School of Information Technology, Wadala, Mumbai

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**ABSTRACT**

*This study is about the Insolvency and Bankruptcy code 2016 (IBC). It is the law of India for Bankruptcy which was specially created to initiate a consolidated framework to have a single law for insolvency and Bankruptcy. The Code received the approval on 28 May 2016 by the President of India. This bankruptcy code is a one stop elucidation for solving insolvencies which at present is a long process and does not offer an economically viable arrangement. The code will be able to protect the interests of small investors and make the process of doing business a less burdensome process. The current situation of the economy is beset with Nonperforming assets in the financial sector which is afflicting the banking sector. It promotes free enterprise which will help to bring about an improvement in making credit available and will help to balance the interest of all stakeholders. It also proposed to minimize the role of Adjudicating Authority and helps to tackle the hundreds of years of out of date laws like the Presidency Towns Insolvency Act, 1909 and Sick Industrial Companies (Special Provisions) Repeal Act, 2003 etc. this paper helps in the interpretation on the insolvency Agency framework that is the strengthening of the IBC in terms of the procedural and governing influence of the code. This paper seeks to put light role and scope of the Insolvency and Bankruptcy Code, 2016.*

*Keywords: bankruptcy, Insolvency, law, code, framework, investors*

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**INTRODUCTION**

Solvency directly relates to the ability of an individual person or a business enterprise to pay its long term debts any associated interest. In order to be solvent the value of the assets of the enterprise should be greater than the sum of its debt obligation. The solvency of an organisation can be determined with the help of mathematical calculations.

There is a risk to an entities solvency. Example a change in government policies can have an impact on the company's ability to continue business operations. As solvency represents a company's ability to meet its long term obligations liquidity is a company's ability to meet its short term obligations. If a fund is to be liquid, it must be immediately accessible and easily convertible into usable funds. A company that lacks liquidity can be forced into Bankruptcy.

The Insolvency and Bankruptcy Code, 2016 (IBC) is the bankruptcy law of India which seeks to combine the existing framework by creating a single law for insolvency and bankruptcy. The Insolvency and Bankruptcy Code, 2015 was introduced in Lokh Sabha in December 2015. It was passed by Lokh Sabha on 5 May 2016. The President of India gave his assent for the code on 28 May 2016. Certain provisions of the Act have come into force from 5 August and 19 August 2016. The bankruptcy code is a incredible solution for resolving insolvencies which at present is a lengthy process and does not offer an cautiously viable arrangement. A sturdy insolvency framework where the cost and the time incurred is minimised in attaining liquidation has been long overdue in India. The code will be able to protect the interests of small investors and make the process of doing business a less cumbersome process.

**OBJECTIVES OF THE STUDY**

- To understand Insolvency and Bankruptcy Code, 2016 (IBC)
- To study the interpretation of Insolvency and Bankruptcy Code, 2016 (IBC)
- To create awareness about the Insolvency and Bankruptcy Code, 2016 (IBC)
- To eliminate confusion caused by a complex judicial framework.

**SCOPE OF THE STUDY**

An effective legal framework for timely resolution is to merge and modify the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders including alteration in the priority of payment of liquidation proceeds regarding government dues and to establish an Insolvency and Bankruptcy Fund, and matters connected therewith

or incidental thereto. An effective legal framework for timely resolution of insolvency and bankruptcy would support development of credit markets and encourage entrepreneurship. It would also improve Ease of Doing Business, and facilitate more investments leading to higher economic growth and development.

### **RESEARCH METHODOLOGY**

**Sources of Data:** The study is based on secondary data.

### **TYPE OF RESEARCH**

Here Descriptive research method is followed. The data used are derived from different secondary sources. Quantitative descriptive research is done with help of

### **LITERATURE REVIEW OF INSOLVENCY AND BANKRUPTCY CODE, 2016 (IBC)**

Castanias (1983), in his research "Bankruptcy Risk and Optimal Capital Structure" discussed whether there is or there is not a negative relationship between observed gearing and historical failure rates across lines of business. He examined the relative stationary level of failure rates over time for 21 lines of business for 1940,1950,1960,1970, and for 1972 through 1977. The author concluded that firms in lines of business that "tend" to have high failure rates also tend to have less debt in their capital structures. The empirical results are not consistent with the capital structure irrelevance model of Miller. 1 Castanias, R. (1983), "Bankruptcy Risk and Optimal Capital Structure", *The Journal of finance*, V 38, (3), pp. 1617 - 1635. 69

Altman (1984) in his paper "A Further Empirical Investigation of the Bankruptcy Cost Question"<sup>3</sup> studied about the firms which were bankrupt. He took twelve retail and seven industrial firms for his study. The period for which the study was done range from 1970 to 1978. administrative costs which can be directly measured; and indirect costs as lost sales, reduced managerial energies and higher costs of funds, which can only be estimated. In his study, Altman evaluated the effect of direct and indirect costs. He concluded that bankruptcy cost was not trivial. In many cases they exceeded 20% of the value of the firm measured just prior to bankruptcy and even in some cases measured several years prior. This suggested that capital structure should be set at a point where the marginal present value of tax benefits equals the marginal present value of financial distress costs. He defined direct costs as lawyers', courts', accounts' and other.

Kwansa (1995) in his study of "Bankruptcy Cost and Capital Structure: The significance of Indirect Cost"<sup>3</sup> studied 10 restaurant firms that went bankrupt between 1980 and 1992 investigates the size of the indirect costs to firms that file for bankruptcy, to determine if this cost is substantial. Additionally, he investigates the trade-off between tax savings and indirect bankruptcy costs for its usefulness in signalling potential firm insolvency. One of the findings indicates that the indirect cost of bankruptcy is substantial in absolute terms. With regards to its significance as a proportion of firm value, the findings confirm the fact that the foregone profits represent a sizeable proportion of the firm's value. The other finding was that generally the size of the indirect bankruptcy costs outweighs the size of the tax savings from debt use, the closer the firm is to filing for bankruptcy.

### **NEED FOR INSOLVENCY AND BANKRUPTCY CODE**

- To shorten the time period to resolve insolvency.
- To improve investor confidence.
- Eradicate confusion caused by a complex judicial framework.
- To address the NPA situation conclusively.
- For the Development of the credit and bond market.

### **CHANGES BOUGHT BY CODE FOR INVESTORS**

- Right to control the borrower upon default and maximize recovery.
- Option to initiate the process even if the default is in respect of the debt of another lender.
- Need for more robust monitoring systems to enable judicious exercise of powers.
- Lack of lender consensus on resolution plan can push the borrower into liquidation.
- Clear priority of distribution (waterfall) upon liquidation government dues subservient to those of secured creditors and unsecured financial creditors.

**CHANGES BOUGHT BY CODE FOR BORROWERS**

- Any creditor can file an insolvency petition on a default of one lakh or more.
- Insolvency professional(IP) to take over the management and operations of the borrower during the corporate Insolvency Resolution Process(CIRP).
- Borrowers to focus on liquidity ensure tight cash flow forecasting and monitoring to stay current on payments.
- Need to be proactive in identifying issues communicating with lenders and developing and implementing a turnaround plan.
- In case of fraudulent diversion of assets, personal contribution can be sought.

**RESOLUTION PROCESS**

**Resolution process → Default → Appointment of a resolution professional → Moratorium period (180/270 days) → Formation of Committee of Creditors → 75% of the creditors approve the resolution plan → Implementation of the resolution plan → 25% of the creditors don't approve the resolution plan**

**Default** → Failure to pay whole or any part of installment of the amount of debt or interest due (minimum INRI lakh)

**The resolution plan** → payment of insolvency resolution process costs, payment of the liquidation value to operational creditor in 30 days and to dissenting financial creditor before other financial creditors, Management of the affairs of the borrower after the plan is approved. Implementation and supervision of the approved plan.

**THE CODE AND ITS STAKEHOLDERS**

- The resolution applicant should submit a resolution plan 30 days before the expiry of the extreme period for insolvency resolution – i.e., 180 + 90 days, as the specific case may be. The liquidation value of operational creditors and the sources of funds to pay the insolvency resolution process cost.
- Liquidation value is the estimated realizable value of the assets of the corporate debtor if the commercial debtor were to be liquidated on the insolvency commencement date.
- The resolution plan should provide for the implementation and supervision of the plan.

**FEATURES OF THE CODE**

1. The Code establishes some very basic principles of borrowing and corporate insolvency resolution:
2. The Code prescribes a timeline of 180 days for the insolvency resolution process, which begins from the date the application is admitted by the NCLT.
3. The period is subject to a single extension of 90 days in the event the Adjudicating Authority (being petitioned by a resolution passed by a vote of 75% of the COC) is satisfied that the corporate insolvency resolution process cannot be completed within the period of 180 days. This time period is also applicable to individual insolvency resolution process. During this period, the creditors and the debtor will be expected to negotiate and finalize a resolution plan (accepted by 75% of the financial creditors) and in the event they fail, the debtor is placed in liquidation and the moratorium lifted.
4. The Insolvency and Bankruptcy Board of India will be established to control, maintain, manage and supervise functioning of IPs, IPAs and IUs.
5. The Code seeks to set-up this Insolvency and Bankruptcy Board of India (Board) which will function as the regulator for all matters dealing with insolvency and bankruptcy.
6. Under the Bankruptcy Code, the process for corporate insolvency may be initiated by a financial creditor, an operational creditor or the company (irrespective of whether the same owns an industrial undertaking or not) itself (—Insolvency Applicant
7. It emphasizes on decisive corrective action instead — on the part of all its stakeholders.

**KEY CHALLENGES TO THE IMPLEMENTATION OF THE CODE**

- Expecting the Code to be an immediate answer to all the malaises related to insolvency resolution and NPAs in the country may be little presumptions. Significant uncertainties challenges would have to be surmounted before the Code could be a success on the ground. Mind-set of existing stakeholders: lenders, borrowers and judiciary.

- A complete transformation of the banking system is needed. Specially aspects related to the development of early warning mechanisms, and credit monitoring, proactive commercial decision-making with respect to the way forward. And elimination of inter-creditor conflicts would need to be overhauled.
- Banks would also need to exercise professional judgement in the selection of appropriate IPs/advisors and not follow a “lowest cost” policy without consideration of technical credentials and experience commensurate with the complexity and magnitude of the situation.
- Stressed business owners/managers should acknowledge and focus on the inefficiencies in their current business models in a timely manner and communicate any Liquidity issues to financial creditors and other stakeholders well in advance – along with a turnaround plan.
- Funds availed from lenders (or other sources) by business owners should be utilized for the purpose for which they were granted/intended.
- Dues should be paid off on time as against using operational creditors as a source of working capital financing by inordinately delaying payments.

### **FIRST JUDGEMENT AFTER THE ENACTMENT OF THE CODE**

The appellant before the apex Court is a multi-product company catering to applications in diverse sectors. From August, 2012, owing to labour problems, the appellant began to suffer losses. Since the appellant was not able to service the financial assistance given to it by 19 banking entities, which had extended credit to the appellant, the appellant itself proposed corporate debt restructuring. The 19 entities formed a consortium, led by the Central Bank of India, and by a joint meeting dated 22nd February, 2014, it was decided that a CDR resolution plan would be approved. The details of this plan are not immediately relevant to the issues to be decided in the present case. A CDR empowered group admitted the restructuring proposal vide minutes of a meeting dated 23rd May, 2014. The Joint Lenders Forum at a meeting of 24th June, 2014 approved the restructuring plan. On 9th September, 2014 (hereinafter referred to as the MRA), by which funds were to be imparted by the creditors, and certain obligations were to be met by the debtors

The application was made on 7th December, 2016 by ICICI Bank Ltd., in which it was stated that the appellant being a defaulter within the meaning of the Code, the insolvency code. Ultimately, an application was made on 7th December, 2016 by ICICI Bank Ltd., in which it was stated that the appellant being a defaulter within the meaning of the Code.

### **CONCLUSION**

Most of the regulations, whether it is about winding down under the Companies Act 2013, SDR, SICA or SARFAESI, were well-meant to do. However, they were misrepresented by making the processes prescribed in the regulation as a mere formality to accomplish the desired objective. If this is done with the Code, it will become just another piece of broad legislation. Positive involvement and participation of the key stakeholders that is the borrower and the lender and how they gear up for and contribute to the effective and intended working of the Code would be a critical factor for the success of the Code.

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**IMPACT OF 'MAKE IN INDIA' ON INDIAN TEXTILE INDUSTRY**

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**ABSTRACT**

*The textile industry in India is one of the major sources of export income and employment for the country. It has been influenced by government policies since many years. This paper focuses on an assessment of the impact of long-range policies on the textile industry. The present paper deals with the impact of one of such government policies i.e. Make in India scheme on the Textile sector. India is one of the few textiles producing countries in the world which can claim the complete value chain productivity strength. This sector has several advantages like, abundance of availability of raw materials like cotton and silk, and the comparative advantage in terms of skilled manpower.*

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**INTRODUCTION**

Indian Economy has been growing at a very fast rate. The 'Make in India' initiative by the Government aims at developing the best manufacturing infrastructure to foster innovation in the manufacturing sector. This policy is based on the idea of developing India into a global manufacturing hub and attracting investments from across the globe. It also aims to utilize India's tremendous export potential. Such an initiative is necessary for the transformation of a country from an agricultural society to a modern an industrially developed one. It is necessary for an economy to create new jobs for its population through increasing its manufacturing industry. This sector offers tremendous employment opportunities for people, especially in the rural regions. The textile sector in India accounts for 10% of the country's manufacturing production, 5% of India's GDP, and 13% of India's exports earnings. The progress in manufacturing also has a potential to support the rural and semi-urban industries.

**STATISTICS OF TEXTILE MARKET IN INDIA**

The Indian textile industry is currently estimated at around US\$ 150 billion. India's textiles industry contributed seven per cent of the industry output (in value terms) of India in 2017-18. It contributed two per cent to the GDP of India and employs more than 45 million people in 2017-18. The sector contributed 15 per cent to the export earnings of India in 2017-18.

**OBJECTIVES OF THE STUDY**

1. To study the impact of 'MAKE IN INDIA' policy of government with special reference to Indian Textile Industry.

**MAKE IN INDIA**

The Government of India launched 'Make in India' in order to encourage national as well as multi-national companies to manufacture their products in India. It was launched by Prime Minister Narendra Modi on 25 September 2014. After the launch of this scheme, India received US \$63 billion in FDI surpassing United States of America and Peoples Republic of China. The main aim of this policy is to create jobs and developing skills in various sectors of the economy. It also aims at manufacturing products of higher quality standards, attract more capital and technological investment in India. "The Make in India" initiative is based on four pillars, which have been identified to give boost to entrepreneurship in India, not only in manufacturing but also other sectors. The four pillars are

- a. New Processes
- b. New Infrastructure
- c. New Sectors
- d. New Mindset

**REASONS FOR INVESTING IN INDIAN TEXTILE INDUSTRY**

25 sectors including the textile sector have been identified under Make in India initiative. Indian textile industry has abundant availability of raw materials such as cotton, wool, silk, jute and other manmade fibers. Government policies and incentives are favorable for manufacturers. In terms of skilled labor, it has comparative advantage over major textile producers across the globe. There is readily available market which has the potential to grow in future with increased penetration of organized retail, favorable demographics, rising income levels and shift in preference for quality and branded products. It has an excellent presence of entire value chain for textile production beginning from production of natural fibre to the production of yarn, fabric

and apparel within the country giving edge over countries like Vietnam, Bangladesh etc. It also has market access arrangements with Japan, South Korea, ASEAN, Chile while negotiations with EU, Australia, Regional Comprehensive Economic Partnership (RCEP) countries under process.

### **POLICY INITIATIVES & SCHEMES OF MAKE IN INDIA**

- **FDI Policy**

FDI upto 100% is allowed under the automatic route in the sector. FDI inflows grew by 41% from USD 303 million in year 2012-14 to USD 428 million in year 2014-16. Between April 2016 and December 2016, the FDI equity inflows in the Textiles sector was USD 563.75 million.

- **Exports**

In 2015-16, the share of textiles and apparel in total exports increased to 15% from 13% in 2013-14. The categories that had the most growth were readymade garments, wool & woollen textiles, silk, carpets, coir & coir products and handicrafts. Textiles and Apparel exports are estimated to reach USD 62 billion by 2021 from the USD 38 billion in 2016. Traditionally, India's key export demand has been driven by Europe and America, but new markets such as Iran, Russia and South America are opening up new possibilities for growth.

- **Fiscal Incentives**

A variety of tax reforms and benefits have been introduced in the past two years to promote the sector:

- ✓ **Exports from India Scheme (MEIS):** Launched in April 2015, the MEIS provides duty rewards to eligible textile and apparel categories to an extent of 2-5% of Free on Board (FOB) value. This has now been extended to all countries and covers the entire textiles sector.
- ✓ **Interest Equalization Scheme:** The Government has approved Interest Equalization Scheme on pre and post shipment rupee export credit for five years, starting from April 1, 2015. This will provide relief to the Indian exporters. This will prepare the textile and apparel industry for GST when it comes into force.
- ✓ **Special Textiles Package:** The government has approved a INR 6,000 crore 'special package' for the textiles sector with the aim of creating one crore jobs in the next three years and to attract investments worth USD 11 billion and generate USD 30 billion in exports.
- ✓ **Facilitating Technology up-gradation:** With an eye on attracting investment of up to 1 lakh crores and gainfully employing 35 lakh people, the Government has modified the Revised Restructured Technology upgradation Fund Scheme (RRTUFS) and has launched the Amended Technology Upgradation Fund Scheme (ATUFS), which provides a one-time capital subsidy for 'eligible machinery' for a period of seven years (starting January 13, 2016). The scheme has a budget provision of INR 17,822 crore for seven years. INR 3,277 crore have been released in the form of subsidy over the last two years. An additional incentive of 10% subsidy is provided to garmenting units which avail the Capital Investment Subsidy (CIS) under ATUFS, thereby increasing the upper limit on the cap on capital investment subsidy from Rs.30 crore to Rs.50 crore. An online monitoring system to provide a transparent MIS platform to all stakeholders, i-ATUFS, was launched on April 21, 2016 for online implementation and monitoring of A-TUFS. Under ATUFS, 1547 UIDs have been issued with a project cost of INR 3,780.22 crore involving a subsidy amount of INR 309.62 crore.
- ✓ **Infrastructure Development Scheme for Integrated Textile Park (SITP):** 19 new textile parks have been sanctioned over last two years with potential to facilitate investment up to INR 3,300 crores and employment for 60,000 people when fully operational under the scheme. 200 new production units have come up in existing textile parks (47) in the last two years with fresh investment of INR 1500 crore and additional employment generation of 11,000 persons.
- ✓ **Integrated Processing Development Scheme (IPDS)** which provides assistance to textile processing clusters for setting up Common Effluent Treatment Plants (CETP) with environment compliant effluent treatment technology, have sanctioned 7 projects in the last two years with an assistance of INR 419 crore covering 3000 SME units.
- ✓ **Mega Textile Clusters:** Aimed at setting up permanent marketing infrastructure, three new Mega Textile Clusters in Bareilly, Lucknow and Kutch have been sanctioned and INR 18.30 crore has been released. Under Handicrafts Mega Cluster Mission (HMCM), 9100 artisans have been directly benefited. Two Urban Haat have been launched in Mammallapuram (Chennai) and Eluru (AP).
- ✓ **Ministry of Textiles:** 6 Department of Industrial Policy Promotion of organized textile industry in North Eastern Region Ministry is implementing North East Region (NER) Textile Promotion Scheme (NERTPS),



an umbrella scheme (across silk, handloom, handicrafts, apparel etc.) with a total outlay of INR 1038.10 crore to promote employment and encourage entrepreneurship especially amongst women in the garment sector on a project-based approach. Eight Centres have been set up in all NER States and Sikkim out of which Centres in Nagaland, Tripura, Arunachal Pradesh and Mizoram have been inaugurated.

- ✓ Scheme for promoting Geotechnical Textiles in North East Region (NER): The scheme promotes and utilizes Geo textiles in development of the infrastructure in the NER states by providing technological and financial support for meeting additional costs, if any, due to the usage of Geo textiles in existing/ new projects in road, hill/ slope protection and water reservoirs. The scheme was approved with a budget of Rs. 427 crore for five years from 2014-15. Projects worth Rs. 33.83 crore have been sanctioned for Manipur, Tripura, Maghalaya and Arunachal Pradesh.
- ✓ Innovation through Technology: Six Focus Incubation Centres (FIC) under Technology Mission on Technical Textiles at a cost of INR 17.4 crore have been set up to help budding entrepreneurs develop innovative technical textile products. FICs are provided with a "Plug and Play" model and mentored for taking up the innovation on commercial scale. Industrial sheds with basic infrastructure/basic machineries are also provided.

### **IMPACT OF MAKE IN INDIA ON INDIAN TEXTILE INDUSTRY**

Due to the launch of Make in India, Indian textile Industry has undergone various changes. Some of them are follows:

- ✓ FDI grew 2.5 times - from USD 0.5 billion (2010-14) to USD 1.5 billion (2014-18)
- ✓ 8 Apparel and garment manufacturing centers have been set up in North Eastern Region
- ✓ Integrated Textile Office Complex has been set up at the Indian Institute of Handloom Technology (IIHT) in Varanasi.
- ✓ A new brand named as India Handloom Brand has been launched
- ✓ Special Textile Package of INR 6000 crore has been approved, to attract investment of USD 11 billion and create one crore jobs
- ✓ 200 new production units have come up in existing textile parks in the last two years generating jobs for 11,000 persons.
- ✓ 9.5 lakh people have been trained.
- ✓ India's overall textile exports during FY 2017-18 stood at US\$ 39.2 billion.
- ✓ The production of raw cotton in India has reached to 34.9 million bales in FY18.
- ✓ Employment has increased to 8.62 million in FY18 from 8.03 in FY15.

### **ROAD AHEAD**

- ✓ The future of Indian textile industry looks promising both in terms of domestic consumption as well as export demand.
- ✓ The Indian textile industry is expected to reach US\$ 250 billion by 2019.
- ✓ With the rise in consumerism and disposable income, the retail sector has experienced a rapid growth in the past decade with the entry of several international players like Marks & Spencer, Guess and Next into the Indian market.
- ✓ High economic growth has resulted in higher disposable income. This has led to rise in demand for products creating a huge domestic market.

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**RURAL WOMEN ENTREPRENEURS WITH REFERENCE TO GOVERNMENT SCHEMES  
TOWARDS ECONOMIC GROWTH****Narmatha**Research Scholar, Government Arts College, Nandanam

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**ABSTRACT**

*In India, entrepreneurship is painstaking as one of the best means of causing economic and social development. According to the Global Entrepreneurship Monitor, one in eleven women is involved in entrepreneurship across the world and India occupies the second position among the 22 countries where 14.1% of women have offered into entrepreneurship. In almost all the developed countries in the world, women are putting their steps at par with the men in the ground of business. Today, there are 45 million rural women across India that are mobilized into self-help groups under the NRLM umbrella. Some 3.9 million SHGs and their federations have been empowered with skills, to get finance, markets to sell their products, and business development services. This is triggering a huge change in the lives of the rural women. This paper attempts to explain the women entrepreneur's special schemes by Central Government This is mainly focused issues of rural women entrepreneurship and the responsibilities of institutionalized support in promotion of rural women entrepreneurship. The problems of women entrepreneurs and suggestions to improve the efficiency of women entrepreneurs discussed. Primary and secondary data were used to carry out the study.*

*Keywords: Women entrepreneurs, Rural women, Central Government*

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**INTRODUCTION**

In Indian society, woman's position has been mainly restricted to the home and her role is restrained to reproduction, nurturing of children and taking care their requirements of male by way of generating comfort. Women execute manifold responsibilities by linking all types of household work comprising child care and such another profession as agriculture, animal husbandry, involvement in household or cottage industry, etc. reliant upon the chances offered by the conventionally determined economic and institutional arrangement. Women's role has been disregarded, although they back considerably to the development of a country.

Nowhere do women obtain identical status with men. The women as equivalent associates of men occasionally yield incredible power but women as women hardly exist in the household management. Women Entrepreneurs can be seen everywhere in the startup-up ecosystem of India. Women too are seen leaving their high-profile jobs as well as some stepping out of the four walls of their homes and joining the pool of Entrepreneurship in India. The major factor to jumpstart the entrepreneurial journey is capital and various banks offer specialized loans for women entrepreneurs that have slightly different and more flexible set of terms and conditions pertaining to collateral security, interest rates, etc.

**REVIEW OF LITERATURE**

Surti and Sarupriya (1983) examined the psychosomatic aspects influencing rural women entrepreneurs. They scrutinized the role of trauma witnessed by rural women entrepreneurs, the influence of demographic variables, such as marital status and nature of family on tension and how rural businesswomen manage the same. Outcomes specified that unmarried samples encountered less tension since they have limited family confined obligations. Exterior locus of control was importantly connected to role stress and fear of accomplishment was connected to result insufficiency and role insufficiency scopes of stress. Along with the inhibitions in family and the work environment has enhance the intensity of stress of the women entrepreneurs.

Hisrich and Brush (1986) highlighted the require to make a comparison between characteristics of women entrepreneur and personality characteristics of ideal rural women in order to appraise the personality and motivations of rural women desire to became entrepreneurs. In general, women in executive position expertise in specific functions, inclined to work hard but reluctant to avers risk. Whereas, businesswomen are an eccentric, imaginative, passionate, instinctive and adaptable. She also dealt all the functional activities including hiring, ensure productive environment and cater business issues as well. An extraordinary dynamism level is indispensable for the rural women entrepreneurs' prerequisite to stimulate and persuade her employees. This calls for self-possession, flexibility, persistence, liberation and determination to prosper, etc.

Singh, Sehgal, Tinani and Senguptha (1986) examined the types of constraints encountered by businesswomen to reach the level of success and to identify the encountered by businesswomen to reach the level of success and to identify the operational constraints they are currently facing. The findings of the research work specified that 18.7 per cent rural female entrepreneurs professed that there are operational constraints encountered, whereas

81.3 per cent specified difficulties of diverse nature, like handling works (23%) advertising (20.5%) retrieval of dues (17.9%), financial (10.2%) and movement (13%), etc. Only 44 per cent opined that women had to contest tougher in the entrepreneurial world to be prosper and successful. Only 35 per cent encountered struggle, as these women had children among 10 and 15 years and were not capable to cater their role as mother. Rani (1986) highlighted that that the wish to do something self-reliantly was the major inspirational feature to start a business by the selected businesswomen for the research work. The trainees of the programme for Potential Rural women entrepreneurs, held at Hyderabad in October 1985 have taken up for the research work purpose. The training programme was organized by APITCO. The research work available that the inclination towards to do something independently available to be the important factor which perpetuated the women to adopt business. Some women observed entrepreneurship as an instrument for making money, educational status and revenue aspects do not stimulus women to become entrepreneurs, women also are more capable and assertive of taking independent judgements.

### **OBJECTIVES OF THE STUDY**

- ❖ To explore the different Government schemes available to rural women entrepreneur.
- ❖ To study the problems and constraints experienced by rural women entrepreneurs in their business journey.

### **RESEARCH METHODOLOGY**

The present study is to be based both on secondary as well as primary data. The survey period covers from November 2018 to December 2018 for primary data collection. The secondary data are to be collected from published, unpublished reports. Primary data is used to understand the problems and constraints to the rural women entrepreneurs. The nature of the study is descriptive. Convenience sample technique is used to select the sample. Sample size for the study is 30 and the same is collected from the rural entrepreneurs in Thiruvallur District, Tamil Nadu.

### **LIMITATION OF THE STUDY**

The result of the study is applicable only to Thiruvallur district. Hence the findings of the study are entirely applicable to this district only and also applicable for a short period only. Due to paucity of time, the present study is conducted with limited sample rural women entrepreneurs.

### **SCHEMES FOR RURAL WOMEN ENTREPRENEURS**

Annapurna scheme is offered by the State Bank of Mysore for those women entrepreneurs who are setting up food catering industry in order to sell packed meals, snacks, etc. The amount granted as a loan under this scheme can be used to fulfill the working capital needs of the business-like buying utensils and other kitchen tools and equipment. Under this loan, a guarantor is required along with the assets of the business being pledged as collateral security. Further, the maximum amount of money that is granted is Rs.50,000 which has to be repaid in monthly installments for 36 months, however, after the loan is sanctioned, the lender doesn't have to pay the EMI for the first month. The interest rate is determined depending upon the market rate.

Stree Shakti Package for Women Entrepreneurs is offered by most of the SBI branches to women who have 50% share in the ownership of a firm or business and have taken part in the state agencies run Entrepreneurship Development Programmes (EDP). The scheme also offers a discounted rate of interest by 0.50% in case the amount of loan is more than Rs.2 lakhs.

Bharatiya Mahila Bank Business Loan are support system for budding women entrepreneurs looking to start new ventures in the fields of the retail sector, loan against property, MICRO loans, and SME loans. The maximum loan amount under this loan goes up to Rs.20 crores in case of manufacturing industries and also a concession is available to the extent of 0.25% on the interest rate and interest rates usually range from 10.15% and higher. Additionally, under the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), there is no requirement of collateral security for a loan of up to Rs.1 crore.

Dena Shakti Scheme is provided by Dena bank to those women entrepreneurs in the fields of agriculture, manufacturing, micro-credit, retail stores, or small enterprises; who are in need of financial assistance. The interest rate is also decreased by 0.25% along with the maximum loan amount being Rs.20 lakhs for retail trade; education and housing whereas Rs.50,000 under the microcredit.

Udyogini Scheme is offered by Punjab and Sind Bank so as to provide women entrepreneurs involved in Agriculture, retail and small business enterprises to get loans for business at flexible terms and concessional interest rates. The maximum amount of loan under this scheme for women between the age bracket of 18-45 years is Rs.1 lakh but your family income is also taken into consideration and is set at Rs.45,000 per annum for SC/ST women.

Cent Kalyani Scheme is offered by the Central Bank of India with the aim of supporting women in starting a new venture or expanding or modifying an existing enterprise. This loan can be availed by women who are involved in village and cottage industries, micro, small and medium enterprises, self-employed women, agriculture and allied activities, retail trade, and government-sponsored programs. This scheme requires no collateral security or guarantor and charges no processing fees. And the maximum amount that can be granted under the scheme is Rs. 100 lakhs.

Mahila Udyam Nidhi Scheme is launched by Punjab National Bank and aims at supporting the women entrepreneurs involved in the small-scale industries by granting them soft loans that can be repaid over a period of 10 years. Under this scheme there are different plans for beauty parlors, day care centres, purchase of auto rickshaws, two-wheelers, cars, etc. the maximum amount granted under this scheme is Rs10 lakhs and the interest depends upon the market rates.

### **BARRIERS FACED BY WOMEN ENTREPRENEURS**

The problems and constraints experienced by women entrepreneurs have resulted in restricting and inhibited the expansion of women entrepreneurship. The major barriers encountered by women entrepreneurs are displayed in the chart.

#### **1. FINANCE**

The majority of women business owners have had to rely to a significant extent on self-generated finance during the startup period of their business. Bank loans and grants have only been used in a minority of cases and have usually been accompanied by some form of self-generated finance.

#### **2. ADMINISTRATIVE AND REGULATORY REQUIREMENTS**

Problems with administrative and/or regulatory requirements were judged to be major issues of female entrepreneurs. Micro enterprises of all types can experience problems in meeting administrative and regulatory requirements, because of the disproportionate effect of compliance costs on small companies compared with large firms. At the same time, with a few exceptions, administrative and regulatory barriers more significant for female owned businesses than for male owned firms of a similar size.

#### **3. LACK OF MANAGEMENT SKILLS OR TRAINING**

Women entrepreneurs lacked management skills to a greater extent than small businesses in general, perhaps because of their lower propensity to have had previous business experience. Difficulties with language caused problems for their clients or members, with five feeling that women faced specific difficulties in this respect.

#### **4. MARKETING**

A lack of sales and marketing skills was the most commonly reported problem faced by female entrepreneurs, after finance. It may be seen as part of a general need to raise the level of management skills and competencies in female owned and other small businesses.

#### **5 TECHNOLOGY**

Access to technology and problems with intellectual property protection were regarded as problems for women entrepreneurs. The lack of computer knowledge of employees is a major problem as computer skills are a key part of the business.

#### **6. LACK OF CONFIDENCE**

As women are accepting a subordinate status, as a result they lack confidence of their own capabilities, even at home, family members do not have much faith in women possessing the abilities of decision-making.

#### **7. LIMITED MOBILITY**

Due to primary household responsibilities towards her family, women time gets divided between the two worlds. She has restricted timings for work due to which, she is not in a position to travel frequently and be away for longer periods. Thus, her mobility is restricted.

#### **8. MALE DOMINATED SOCIETY**

A woman is dominated by men in her family as well as business. Often, women has to obtain permission from men for almost everything. They are not treated as equals. Her freedom is restricted. She always has to consult and get approval of men.

### **SUGGESTIONS**

- Women entrepreneurs also explored their perceptions of the types of support that might be most helpful for them in addressing the issues and problems that they are facing.

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- Financial Aspects: Special schemes should be implemented whereby women can get bank loans at decent conditions.
  - Childcare: More childcare facilities should be provided to fit women entrepreneurs' needs.
  - Household: It should be made easier for women entrepreneurs to get help for their households, and initiatives like
  - Working time: Self-employed women should be encouraged to employ on a part-time or full-time basis at least one person so that they have more time for their family and can take interest in other occupations, actively participate in decision-making bodies.

### **CONCLUSION**

Up to a greater extent the rural women entrepreneurship is directly proportional to the rural growth and development. Government should take initiatives to upgrade their skill and institutions should come up with offering education program for women entrepreneur. The above schemes help the women entrepreneurs towards economic growth of our nation. If the women are empowered with economically and financially the growth of our nation is certain. The Central Government keen to improve the huddles of women entrepreneurs.

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**SMART KHETI – AN INTELLIGENT WAY OF FARMING**

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**ABSTRACT**

*Piezoelectric sensors come under the group of electromechanical sensors. They can be used to store electric energy in the batteries. The finding came from experiments that measured an electrical charge on a layer of crystals (e.g. topaz, tourmaline, cane sugar and quartz) after placing these crystals to mechanical stress. This introduced the concept of piezoelectricity – accumulation of an electrical charge in crystals from applied stress. Gathering of an electrical charge as a result of change in the state of pressure is often known as an electromechanical interaction. With change in pressure being the main motivation for creating a charge in the crystal material, the piezoelectric effect can be reversed as soon as the pressure is lifted. This paper explains a fact or situation that is observed to exist or happen via the use of piezoelectricity instead of using Solar Panels in Farming and presents the characteristics, principle of work and measuring schemes with piezoelectric sensors and comparison with the government scheme KUSUM which uses solar panels for power supply in Farming.*

*Keywords: Farming, KUSUM scheme, Electricity, Piezoelectric, Solar Panel.*

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**INTRODUCTION**

The government of India introduced several beneficial schemes for the farmers of the country. The main aim of the current government and Finance Ministry is to improve the farming sector of the country (K.j.Staff, 2018). Rural electrification is one of the essential needs for a country like India with major population of approximately 70% living in rural areas. The fact is that only 44% of farming in India has access to electricity. In order to benefit the farmers, the government has launched KUSUM scheme (Kisan Urja Suraksha evam Utthaan Mahaabhiyan). KUSUM scheme aims to provide the farmers with advanced technology to generate power. KUSUM scheme endorses solar farming among farmers for energy efficiency.

Availability of power supply is must in villages for farming otherwise it isn't meaningfully electrified, even though electricity lines are laid out. It is the duty of the concerned State power utility to ensure that there is supply of power.

Renewable energy is obtained by natural processes with continuous restoration. There is a wastage of energy everywhere. An immense number of cars are running though highways (D. Vasic1, 2015). We can overcome electricity threats by using piezoelectric effect for generation of voltage and use it for rural electrification of our country. If we place piezoelectric sensors on the highways, then we can generate voltage and store it in battery, whenever vehicle will pass through the piezoelectric sensors.

The goal of this paper is to find out a path to generate certain voltage which can be used for farming activities like using water pumps operated by diesel pump which takes seven hours whereas electric pump takes only three hours, planting and harvesting crops, applying chemicals, etc. (Kongrukreatiyos, 2014). When any vehicle passes, or someone will walk over, or any kind of physical activities give a pressure on the piezoelectric plates or sensors and generate electricity. The main aim of this paper is to eliminate the electricity problems of rural areas. Apart from this, the goal is to convert the wasted energy during motion of vehicle to usable electrical energy.

**NEED OF PIEZOELECTRIC SENSOR IN FARMING**

KUSUM scheme as suggested by the government of India operates on solar energy, however solar energy incorporates many disadvantages which gives rise to use of piezoelectric sensors. The cost of installing a solar panel is relatively high depending upon the size of panel and the size of the farm. For example, to generate 1 megawatt, a solar farm would require about 2.5 acres. The size of solar farms are less than 100 acres in size. Solar panel also takes up lot of space.

Due to poor weather conditions the output level of solar panels gets affected. Solar farms are required to be installed in region where there is plenty of sunlight. Solar power completely relies on sun, but sun does not shine 24 hours. Also, solar power is not available at night time. Solar power works with less intensity when the weather is cloudy.

The life of a solar panel is roughly about 20 to 30 years. The solar panel becomes less effectual over a period as it guarantees only 90 percent production after 10 years and 85 percent of production after 25 years. (Lozanova, 2018)

Recycling solar panel is a difficult task as they contain different types of materials which include copper, lead, gallium and cadmium, silicon solar frame, aluminium frame. These materials must be separated for proper recycling. Also, these materials are harmful for the environment.

### WORKING OF PIEZOELECTRIC SENSOR

The fact that an electrical power source is not necessarily required to generate a piezoelectric effect and has begun the path to the engineering of energy efficient technology for farming. In this paper we have introduced a novel street whereby renewable energy is harvested from the footstep or moving of vehicles on the road which can be next to the farm. The basic principle to this type of technology implements the idea of piezoelectric effect and involves the conversion of kinetic energy to electricity (Patra, 2016). The piezoelectric sensors under the road is engineered with a centrally fixture that connects with the batteries attaches and the energy is stored as the mechanical pressure is applied on to the sensor as shown in figure 1. The electrical energy that is created from this piezoelectric stimulus is collectively used to power farming for water pumps and many wayfinding solutions. Also, though the power source generated by a piezoelectric device is insignificant as a single unit, energy from thousands of piezoelectric devices as a result of pressure from highways could be powerful enough to collect a significant amount of energy in the batteries and use it for farming activities.

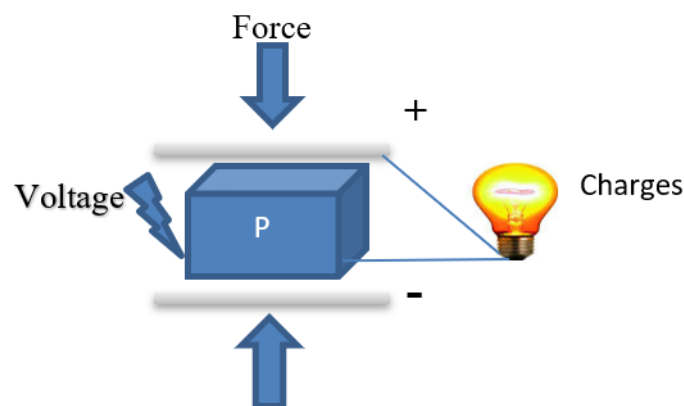


Fig-1: Working of Piezoelectric Sensor

### 3.1 Advantages

1. It is an eco-friendly process.
2. It works real time, without any external source.
3. It produces up to 0.33V by applying pressure using a thumb.
4. Only One-time investment.

### 8. Conclusion

The idea of electrification by piezoelectric effect in farming activities is an eco-friendly idea for saving electricity and major conclusions are as follows:

- During the work progression of the project the arrangement of the sensors is the most challenging part.
- The most important matter is that this idea is comprised of natural power and huge source.
- Using other resources of electrical energy generated from the piezoelectric slab can also be a renewable source for other activities where electricity can be used.

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**THE IMPACT OF IN-STORE SHOPPING ENVIRONMENT ON IMPULSIVE BUYING OF CUSTOMERS WITH REFERENCE TO THANE DISTRICT****Dr. B. S. Gite<sup>1</sup> and Soni R Hasija<sup>2</sup>**Research Guide<sup>1</sup>, K K M College, Manvat<sup>2</sup>Research Scholar, Neral Vidya Mandir College, Neral

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**ABSTRACT**

*This dissertation aims to study the influence of in-store shopping environment on the impulse buying behaviour of the customer. In this paper factors that impact impulse buying among shoppers will discuss. The study revealed that are economic in nature such as coupon and price discount are more influence on impulse buying than background music, in-store display and sales force. Keywords: Dissertation-paper, revealed-Leak, impulse-strong desire.*

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**INTRODUCTION**

The successes of the today's retail business fundamentally depend upon how creatively organisation understands the consumers and develop their marketing mix activities. Outdoor activities in store development activities like display and promotion, background music, supporting staff and kid's engagement activities are the new mechanism to encourage the consumers to spend more time in the same Store. In store promotion activities held dig deeper for unplanned purchases for which a new term "Impulsive buying" has been coined.

Impulse buying is pushing the customers with modern state of the art attractions in the form of offering a beautiful Ambience, fresh air, display at point of purchase, trained staff and great hospitality. Gutierrez (2004) described unplanned purchase as a deliberate thoughtful search and evaluation that normally results in rational accurate and better decisions. Contrary to a planned purchase, the concept of impulsive buying is the both complex and paradoxical. Impulsive buying defined as an unplanned purchase.

**LITERATURE REVIEW**

Different type of studies has been conducted to find out the impulsive buying behaviour of the customers. The researches helped to understand the attribute that drive the consumers for impulsive buying demographic variables responsible and contributions of in store activities for the same. Zhou and Wong (2004) categorised the impulse shopping environment into two categories. Badhaiyaan and Verma (2015) state and issues house situational variables impact the buying behaviour 9 variables what taken into consideration for studying the in pulses purchase and revenue generation. The study indicated that money availability staff behaviour and credit card acceptance are the major factors for impulse purchase. Apart from store music these factors construct the odds for impulsive buying. Mainly friendly atmosphere and credit card are more positively associated with impulsive buying. Anesbury et al (2012) examines a shelf space is provided to a product Atta retail outlet the study concluded that the impact of product positioning is closely associated and attract the customers. Thakor and prajapati (2012) have defined look their research focuses on the booming industry in the present situation, cosmetic market. Research reveals that is an existing factor: females surely hold the attention with bright light beautiful environment and eye catching colours and display. Kacen and Lee (2002) emphasizes that the growth of e-commerce the growth of e-commerce is again a major factor in the factor in the in the decision making process parallel to this culture of an individual and collectivism systematically influence the buying behaviour of the customers. This research has a made to understand the shopping behaviour of human for beauty products, visual merchandise has a direct impact on the store collection and buying decision. The store with beautiful and transparent display, focus lighting and clean environment can hold the customers attention.

**OBJECTIVE**

To study the in store shopping environment and its impact on impulsive buying behaviour of the customers.

**HYPOTHESIS**

In store shopping environment significantly affect the impulse buying behaviour of the customers.

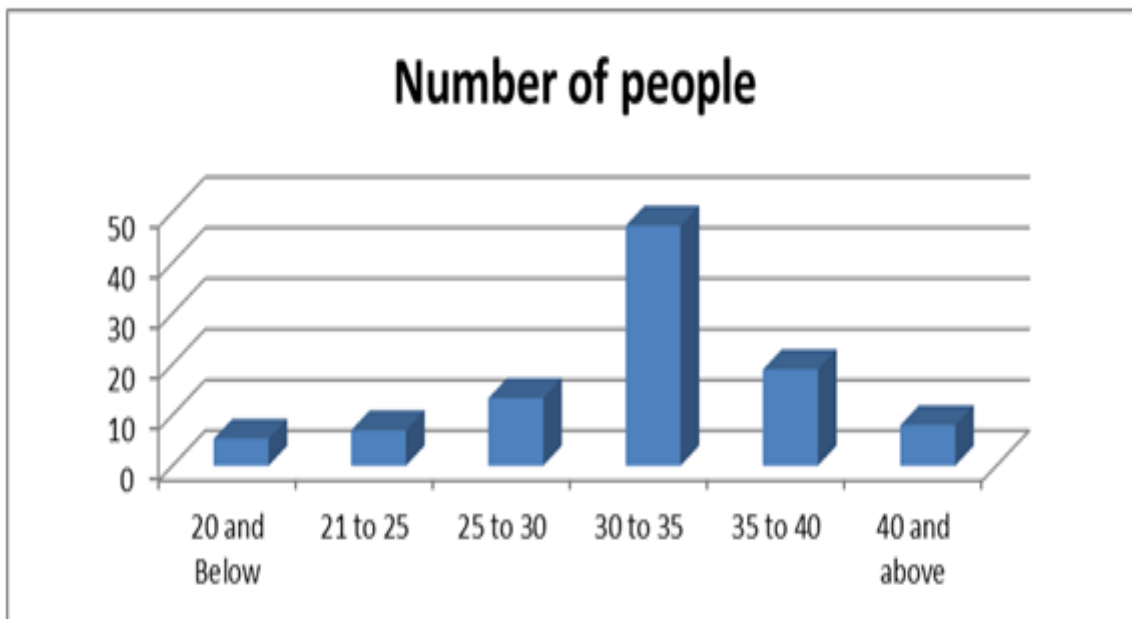
**METHODOLOGY**

Quantitative Research Design is used to conduct this study primary data was collected from hundred respondents and the centre of Data Collection who was one month from December 2018 to January 2019. Respondents from D'mart, Reliance Mall and Patel low price were selected for getting the responses for the study. Convenience sampling technique was used to get the questionnaire filled.

**RESULTS AND DISCUSSION**

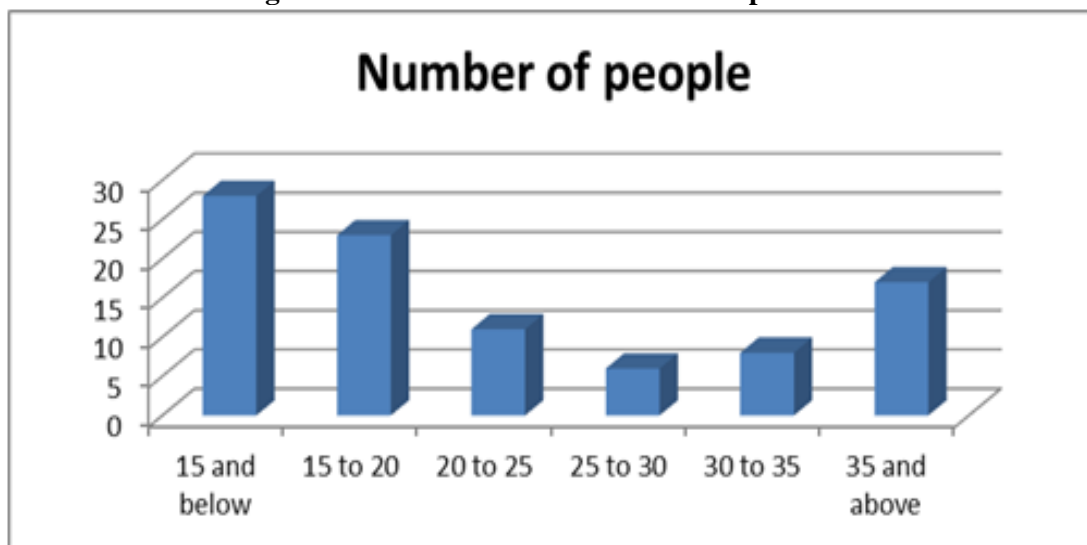
Age distribution of 300 respondents’ frequency and percent of each corresponding group is provided in figure no 1.

**Figure-1: Age Distribution of the Respondents**



Income distribution of 300 respondents’ frequency and percent are provided in figure no 2.

**Figure-2: Income Distribution of the Respondents**



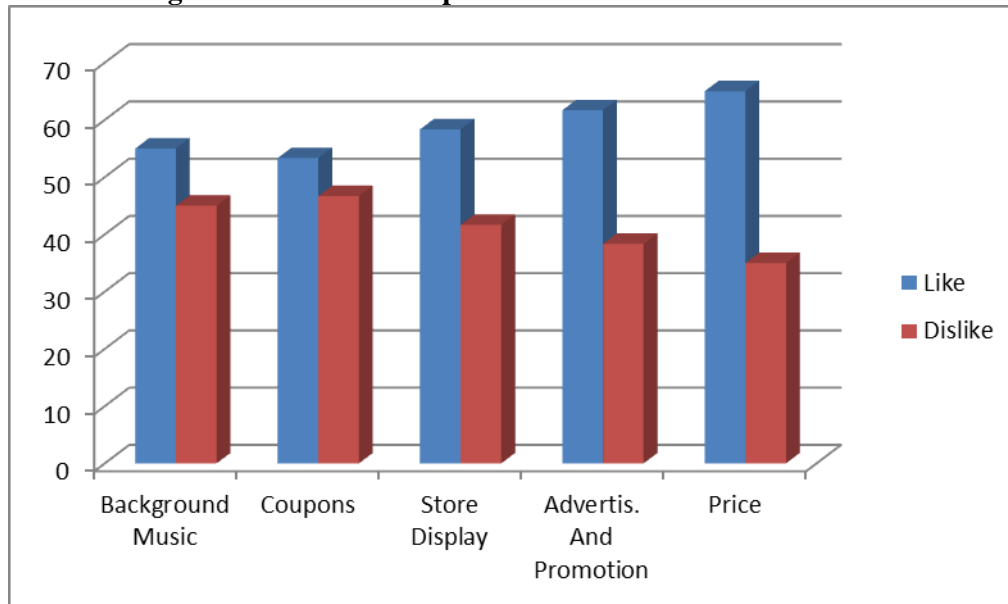
**MEASURING INSTRUMENTS**

Questionnaire for this study a close ended questionnaire ended questionnaire for a standardized respond divided into two sessions which was used to collect data from respondents and it is based on five point liker scale. Reliability test: To check the reliability of the study. Coefficient of Alpha range between 0 to 1 and it is considered it is considered accepted when value is greater than 0.6 but less than 0.8 values greater than 0.8 is considered good. For the present study value is 0.69 which is acceptable.

**RESEARCH PROCEDURE**

Mall intercept technique is used to get the questionnaire from the respondents from the respondents who were coming out of the out of the coming out of the supermarkets and other stores the question universe completed and returned to the questionnaire the questionnaire administrator immediately this is help the respondent to clear the doubts on the spot doubts on the spot consumers like and dislike and dislike on various in a store factor store factor for various impulsive purchase as shown in figure number1. The vertical Axis shows the percentage of shows the percentage of the percentage of likes and dislikes on 5 factors what are mentioned on horizontal axis.

Figure-3: Customer Response to the various in store factors



### RESULTS AND DISCUSSIONS

As shown in the figure 3 crowding at the shop floor plays a negative role in impulsive buying behaviour, in store background music and ventilation are not likely to affect the impulsive buying behaviour of the customers. The rest of the variables are likely to influence the impulsive buying behaviour of the consumers. The other factors that influence impulsive buying are coupons and vouchers, store display, in-store advertisement, and behaviour of the staff. Psychological and promotional factors like attractive store display, sales team, and customer interaction, coupons and vouchers, and price cuts are the monetary factors having a high impact on impulsive buying behaviour of the customers. They tend to shop more if they have coupons. Some store brands are not only bought but they can increase the shopping list as well. Changes in the prices of products contribute to increase the profits of the firm and adding on an unwanted product in the shopping cart. Discounts attract more shopping because with a given amount of money the purchasing capacity of an individual increases.

### CONCLUSION

The result shows that coupons and vouchers, store display, advertisement, and promotion behaviour of the staff at the shop floor and price are the major five factors that impact compulsive purchase. Promotional activities like coupons and vouchers significantly contribute to the saving of the customers. It not only allows savings but sometimes a purchase of brand at the same time their shopping decisions are quick and moreover on those products they save more. The study concentrated on the relationship between in-store shopping atmosphere and impulsive buying. The previous study work done on one or two variables impacting the impulsive buying behaviour. While the current study focused on various factors that will totally impact impulsive buying. Each factor is discussed briefly and states the percentage level and the impact on impulsive buying behaviour of the customers. The present study discusses the factors that impact impulsive buying among shoppers which in turn increase company's sales and revenue.

### LIMITATION OF THE STUDY

The sample of the current study majority falls under the middle income age group and they cannot be representative of all the customers. Another limitation is that the sample of the study majority falls under the age group of 30 to 40 years and they might not be representative of the other age groups. Further, research can be conducted on new technology, fashion, and accessories in a more specific manner.

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## IMPACT OF SOCIAL NETWORKING SITE (INSTAGRAM) AMONG WOMEN

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### ABSTRACT

*The Influence of Social Net Working Sites (SNS) has been discussed all over the world and Social media is used as a entertainment tool by all people with different age group. The purpose of the study was to determine the Influence of Social Networking Sites among women. The researcher has followed descriptive research design for this study. A semi structured research questionnaire was designed to determine the factors of social networking sites that have influenced women especially Instagram and how they have perceived.*

*Keywords: Social networking site, influence, Instagram*

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### INTRODUCTION

Social Media is now a part of everyday life. It is used by people from all walks of life and it connects people, businesses, nations and organisations alike. Social Media is helpful in grouping of individuals with similar interests. Through social media people share their views based on their experience. It is also one form of entertainment which allows all of us to reach others on online communication those who have specific interest. Social media websites such as Facebook, Twitter, Instagram, YouTube, Skype, LinkedIn and Whatsapp are some of the popular modes of online communication networks among people. It helps to exchange information, share ideas, pictures virtually.

Instagram is a social networking app where the users can share photos, videos, links, follow, chat, stream live video on the web. Users can share with a selective group. The app allows users to upload photos and videos to the service, which can be edited with various filters, and organized with tags and location information. An account's posts can be shared publicly with pre-approved followers. Users can "like" photos, and follow other users to add their content to a feed

Instagram launched in October 2010, and when Facebook purchased the photo-sharing platform in 2012 it had just 30 million users. Now, Instagram is the sixth most popular social media platform in the world. Instagram CEO Kevin Systrom announced in June 2018 that Instagram has reached more than 1 billion users. That's more than 1/10th of the world's population.

### NEED AND IMPORTANCE OF THE STUDY

Instagram is an emerging social media platform for the marketers and it helps them to promote their products and services. They are penetrating globally using social media platforms and it is also providing entertainment to customers. It has become a revenue generator for many businesses because within a short span of time it creates many attentions among the public. In this study the researcher focuses on the impact of social networking site (Instagram) among women respondents in Madurai region.

### OBJECTIVES OF THE STUDY

- To study the demographic profile of the respondents
- To understand how the respondents have perceived instagram app
- To find out the major factors influencing respondents while using instagram
- To provides suggestions based on the study

### PREVIOUS RESEARCH

**Valkenburg & Peter, 2009; Wei & Lo, 2006**) have discussed about the usage of social media and internet among the people and highlighted that there is a gender difference when using social media. They demonstrated that male spent more time than female on computer games and female spent more time than male on chatting.

**Bryant et al., (2006)** echoed that many adolescents preferred technological communication in order to express their feelings and thoughts instead of using face to face communication.

**Boyd & Ellison, 2007; Hakoyama & Hakoyama, 2011** has revealed that Social media has really become an integral part of people in daily lives.they were using social networking sites for entertainment.

**Williams & Merten (2009)** studied that people have a social networking sites account based on difference reasons like making new friends, following famous people, sharing personal information, commenting the events, etc.

**METHODOLOGY**

This is a descriptive and analytical study based on both primary and secondary data. Primary data was collected from 130 women respondents of different age groups in Madurai region using a structured questionnaire. The secondary data was collected through journals, research articles, magazines, from websites etc. The questionnaire is pretested using 20 samples for testing the reliability using Cronbach’s alpha test and it was proven reliable with 0.716

**ANALYSIS OF COLLECTED DATA AND RESULTS**

The analysis of data collected was done with several tools. The results of the study were listed below after analysing the demographic profile of the respondents.

- 50% of the respondents were between 20 to 30 years.
- 74.5% of the respondents were graduates
- 63% of the respondents were students
- 45% of the respondents monthly income is below Rs.30000
- Only 33 % of the respondents have used Instagram when compared to other networking sites.
- Averagely 2 to 4 networking sites are used by the respondents and they spent 60 minutes daily on social networking
- Majority of the respondents use smart phones to access Instagram when compared to other gadgets.
- 56 % of the respondents used their Instagram account daily
- 39% of the respondents have told that they are active using Instagram
- Respondents normally had spent less than 30 minutes in Instagram
- 79.6% of the respondents didn’t accept the request from strangers
- 59% of the respondents had used unfollow option
- 67.5% of the respondents had used report option
- 28% of the respondents had tagged their posts with other friends
- 63% of the respondents were using Instagram for time pass and to engage with new friends.
- 26 percent had agreed that Instagram is useful in day to day life.

**CHI SQUARE TEST**

**Table-1: Age and time spent by the Respondents in Instagram**

Time spent	Age (in years)			Total
	Below 20	20-30	30 and above	
Below 30 mins	14	30	11	55
30-60 mins	8	23	10	41
More than 60 mins	12	13	9	34
Total	34	66	30	130

Source :Primary data

**CHI SQUARE TEST**

	VAlue	df	p value
Pearson chi square	5.107	4	.279
Likelihood ratio	5.273	4	.263
N of valid cases	130		

Source :Primary data

The relationship between age and time spent by the respondents were analysed using chi square test and the results shows that there is no significant relationship as the p value(.279) is greater than the significant value.

**FACTOR ANALYSIS**

Analysis were made to study the various factors which influence the perception of the respondents towards Instagram among women

**Table-2: KMO & BARTELETT’S TEST**

KMO & BARTELETT’S TEST		
Kaiser meyer olkin measure of sampling adequacy		.603
BARTELETT’S TEST of Sphericity	Approximate chi square	2417.883
	df	666
	sig	.000

Source :Primary data

The above table revelas that KMO measure of sampling adequacy is .603 and Barlett’s test shows a significance of 0.000. Therefore factor analysis could be applied to 37 factors measuring the perception of the respondents with respect to Instagram among women. It was observed that all measures of sampling adequacy were more than 0.5 and all the 37 factors were used for analysis. Principal component method of factor analysis and the varimax method had been used to group 37 variables to 11 factors.

**Table-3: Name of the factors**

Factor	Overall sample size = 130
Factor 1	Security
Factor 2	Health problems
Factor 3	Academics pressurizers
Factor 4	Awareness
Factor 5	Social influencers,
Factor 6	Political influencers
Factor 7	Marketing influencers
Factor 8	Promotional use,
Factor 9	Privacy
Factor 10	User preference
Factor 11	Virality
% of total variance explained	70.508%

Source :Primary data

The 11 factors are identified and grouped as security, health problems, academics pressurizers, awareness, social, political, marketing influencers, promotional use, privacy , user preference, virality .the variance of each variable is observed to find out the impact of each factor.

**WEIGHTED AVERAGE TEST**

These factors were analysed using weighed average test to identify the ranks and among the factors

**Table-4: Weighted average test-impact of instagram among women**

S.No	Factors	Mean scores	Rank
1	Security	2.7026	9
2	Health problems	2.6231	10
3	Academics pressurizers	2.5154	11
4	Awareness	4.1288	1
5	Social influencers,	3.0446	8
6	Political influencers	3.6513	2
7	Marketing influencers	3.3154	7
8	Promotional use,	3.6192	4
9	Privacy	3.3769	5
10	User preference	3.3282	6
11	Virality	3.6231	3

Source :Primary data

From the above table , among 11 factors, awareness is identified as topmost and academic presurizers are identifies as the least one.

**CONCLUSION**

Generally individuals who are inevitably attached to these social networking sites are young adults and adolescents. It has raised popularity as women spend an excessive amount of time on Instagram. They are using as a entertainment tool to have touch with friends and so many have reunited using this social media. It allows people with common interest and beliefs, etc. It is a tool used by marketers for short term advertising campaigns and to grab the online opportunities through uploading beautiful pictures and videos. But it has reached minimum people only.

**SUGGESTIONS**

- Initiatives should be taken to bring women online specifically in rural areas
- Security measures should be increased to cut the fake accounts
- Privacy policy should be strengthened to protect women users from harassment
- Advertising and promotional strategies can be focused on products especially used by women
- Steps should be taken to avoid rumours and false information
- Government should take steps to increase social awareness



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**BHIM APP - AN INITIATIVE FOR ECONOMIC GROWTH THROUGH DIGITIZATION**

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**ABSTRACT**

*Digital India: - It is one of the big initiative by government in refraining the various issues like black money, corruption, terrorism etc. After the launch of digital wallets many things have been change .The main initiative by the government to launch many UPI SOLUTIONS and BHIM app for easy access to digital payments. This initiative is taken for rural segments for improving the digital trend in those areas. Digitalization brings transparency in transactions and if transactions takes place through digital payments it gives privilege to the Indian Economy. Through modernization of payment system, overall cost of banking service will reduce and will help to promote cashless –based economy.*

*Keywords: digitalization, cashless-based economy, transparency, digital wallets.*

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**INTRODUCTION****Demonetization Upgrades Digitization**

A sudden expansion in online transactions leads to card payments and mobile wallets to handle their daily expenses. But card payments have been the main source of paperless or plastic cash used for daily use, card payments have struggled to upgrade due to the uneven nature of the retail sector In such a scenario, Mobile as a platform has a unique set of capabilities that can overcome the challenges posed by the Indian payments landscape. Mobiles offer a low-cost means to create financial access and payments. It can extend the last-mile reach of banking services either through business correspondents or directly to the end consumers. Improvements in the telecom infrastructure, access to internet connectivity and low-cost smartphones will eliminate the need for hardware based on fixed line connections. Mobile can be a platform that uniquely combines digital identity, digital value and digital authentication to create low-cost access to financial services.

**DIGITAL INDIA**

The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. “Faceless, Paperless, Cashless” is one of the blatant role of Digital India. Cashless is a word which literally means having no cash but in today’s world, it refers to using digital form of payments instead of cash for payment of various expenses or transactions done by the individual. Digital India was launched by the Prime Minister of India NarendraModi on 2 July 2015 with an objective of connecting rural areas with high-speed Internet networks and improving digital literacy. The visualization of Digital India programme is inclusive growth in areas of electronic services, products, manufacturing and job opportunities etc. and it is centered on three key areas – Digital Infrastructure as a Utility to Every Citizen, Governance & Services on Demand and Digital Empowerment of Citizens. India has joined other countries in the digital payment revolution a lot faster than the past where we often lagged behind in adopting technology. In the retail sector we have very high volumes of money transactions. Other than cash, one of the growing payment methods adopted by merchants in the sector is payment cards. However, the whole isometrics of moving from cash-driven economy to cashless economy has somehow been assorted with demonetization that was aimed to extract liquidity from the system to unearth black money.

**DIGITAL WALLET**

A digital wallet is an instrument for doing payments recharges and transfer money electronically. It is used for online shopping also. The wallet can be opened against a mobile number and an email id, sometimes an only mobile number is sufficient. The service can be used only if a person has as Smartphone and internet access facility to the phone. This system is introduced by National Payment Corporation of India (NPCI), which is a government body. It is an umbrella organization for all retail payments system. It has introduced a virtual payment system called unified payment Interface (UPI) for the seamless transaction of money using the technology and smart phone. After demonetization, people are expressing their interest in using all these new technologies. Google search is also showing a steep increase in these types of search terms e.g. NPCI UPI app. (IndiaStack, 2016)

**WHAT IS UPI?**

UPI is a payment system by which any bank account holder can send and receive money from their smart phone with the use of virtual payment address (VPA). It was launched by NPCI in April 2016 and first UPI enabled

app was launched in August, 2016. Almost all leading banks have the UPI enabled app in the app store. Any bank account holder can use the UPI app. The user does not have to enter his banking details every time.

### WORKING PROCESS OF UPI

UPI enables the user to transfer the money from Smartphone without using cumbersome process of entering account number, IFSC code etc. for payment or transfer of money before actual payment. This process is enabled with the help of AADHAAR, user's mobile number, and VPA. When user sign up with a UPI-based app, it will generate a virtual id of user such as username@bankname.com. In case user add multiple accounts, they have to set the default account on which the money will be debited or credited unless the user chooses another account. It is based on immediate payment service i.e. IMPS which means it is available 24x7 throughout the year. To make the money transfer only the virtual address of the person is required which can be obtained through UPI App after the confirmation from the user.

### TYPES OF DIGITAL WALLET

There are three types of digital wallet present in India.

**Closed:** These types of the wallet are issued by any company and it is to be used for payments, shopping etc. for that store only. For example: - Various online shopping portals like Flipkart, Make My Trip has closed wallet where money is returned because of product or service cancellations.

**Semi-Closed:** The money available in these wallets can be used for online shopping, recharges and bill payments. It cannot permit to withdraw cash. The money in this semi-closed wallet is managed by payment companies. As per RBI regulations, these payment companies have to open an escrow account in a bank. The interest depends on the agreements between bank and Payment Company and varies from 4% -6%. For example: - paytm, airtel money, mobiwik etc.

**Open:** These wallets can be used for the purchase of goods and services, including financial services such as insurance, mutual funds. Vodafone m-Pesa is an open wallet with ICICI bank which enables to withdraw cash and transfer money to other mobile bank accounts. The fund transfer at merchant locations or point-of-sale terminals that accept cards, and also cash withdrawals at ATMs. The issuing banks are managing the money for the open wallets. The infrastructure is managed by payment companies. The interest earned from the money is shared by both the companies as per the agreement.

### BENEFITS OF DIGITAL WALLET

1. Digital wallets enables to pay electricity bill, telephone bill, recharge of prepaid mobile, booking of bus and movie tickets etc. (Gupta, H., 2016)
2. It is user friendly. (Gupta, H., 2016)
3. It helps to minimize the risk of exposing credit card details. (IndiaStack, 2016)
4. Digital wallet does not charge any transaction fee (IndiaStack, 2016)
5. Cash back is used as tool of promotional activity for digital wallets. (Gupta, H., 2016)
6. To enable high value transactions upto INR 1,00,000, digital wallets allow the user to upgrade his account. (Gupta, H., 2016)

### OBJECTIVE OF THE STUDY

1. To study the role of BHIM app in Digitization in developing economy.
2. To explore the benefits of BHIM app.
3. To study the policy implications surrounding the digitization ecosystem.

### BHIM

The Mahabharata would have given mighty Bhim live unconquered virtually indestructible. UPI Powered Bharat Interface for Money (BHIM) was among the first tide of apps launched to complete digital Payments using Universal Payment Interface (UPI). It is managed by the not-for-profit National payments Corporation of India (NPCI). It is talisman for digital payments. It is launched on 30.12.2015. It is downloaded at Android - 21.65 million, IOs- 1.03 million. Its main impact is to accelerate the digital payments which is showcased by - UPI. It leads to Digital Payments ecosystem development. Bharat Interface for Money is an app that lets you make simple, easy and quick payment transactions using Unified Payments Interface (UPI). You can make instant bank-to-bank payments and Pay and collect money using just Mobile number or Virtual Payment Address (UPI ID). Wallets have a few shortcomings. Only a fixed amount of money can stay in a wallet app,

unlike BHIM. Wallets do not allow users to send or receive money from different mobile wallets; whereas there is no such restriction within the BHIM app as it uses UPI.

### THE FEATURES OF BHIM

- **Send Money:** Send money by entering Virtual Payment Address (UPI ID), Account number and QR Scan.
- **Request Money:** Collect money by entering Virtual Payment Address (UPI ID). Additionally through BHIM App, one can also transfer money using Mobile No. (Mobile No should be registered with BHIM or \*99# and account should be linked).
- **Scan & Pay:** Pay by scanning the QR code through Scan & Pay or generate your to let others make easy payments to you.
- **Transactions:** Check your transaction history and also pending UPI collect requests (if any) you can raise complaint for the declined transactions by clicking on report issue in transactions.
- **Profile:** You can view the static QR code and Payment addresses linked to your account. You can also share the QR code through various messenger applications like WhatsApp, Email etc. available on phone and can also download the QR code.
- **Bank Account:** Switch between multiple bank accounts linked with your BHIM App. You can set/change your UPI PIN or check your balance.
- **Language:** Currently BHIM is available in 12 languages, i.e., Hindi, English, Tamil, Telugu, Malayalam, Bengali, Odia, Kannada, Gujarati, Marathi, Assamese and Bengali.
- **Block User:** Block/Spam users who are sending you collect requests from illicit sources.
- **Privacy:** Allow a user to disable and enable mobilenumbers@upi in the profile if a secondary UPI ID is created (QR for the disabled UPI ID is also disabled).
- **Payment Reminders:** Schedule payments as per your convenience.
- **Split Bill:** Splitting bills with multiple UPI users at a click of a button.

### HOW TO USE BHIM APP

#### First Time User

Step 1: Download and Install BHIM app from Google Play store/Apple App Store.

Step 2: Select your preferred language.

Step 3: Select SIM card which has the mobile number registered with your respective bank.

Step 4: Set the application passcode required to enter the app.

Step 5: Link your bank accounts using bank account option.

Step 6: Set your UPI PIN by providing last 6 digits of debit card and expiry date of debit card.

Step 7: Click on send and enter UPI ID or Aadhaar number. You can also Scan & Pay the QR of the person to whom you want to send money.

Step 8: Enter the UPI Pin you set earlier to authenticate the transaction.

Step 9: Check transaction history to see the status of the transaction.

### PRE-PAID PAYMENT SYSTEMS

Pre-paid instruments are payment instruments that facilitate purchase of goods and services against the value stored on these instruments. The value stored on such instruments represents the value paid for by the holders by cash, by debit to a bank account, or by credit card. The pre-paid payment instruments can be issued in the form of smart cards, magnetic stripe cards, internet accounts, internet wallets, mobile accounts, mobile wallets, paper vouchers, etc. Subsequent to the notification of the PSS Act, policy guidelines for issuance and operation of prepaid instruments in India were issued in the public interest to regulate the issue of prepaid payment instruments in the country. The use of pre-paid payment instruments for cross border transactions has not been permitted, except for the payment instruments approved under Foreign Exchange Management Act, 1999 (FEMA). (SOURCE: RBI)

**PROMOTING INTEROPERABILITY**

The requirement of users for seamless payment experience are met only when the payment systems are inter-operable and are able to communicate within their own segments on the basis of common standards adopted by all providers of these services. Vision-2018 envisages promoting interoperability in areas which have a high potential for driving electronic payments, including for small value transactions through At present although a large number of banks are offering mobile banking services these are not completely inter-operable, especially for merchant transactions. This, in turn, has impacted the use of mobile payments for merchant / P2B (Person to Business) transactions. Full operationalization of UPI, which aims at this customer convenience, will provide the standard interface for communication across different mobile-banking applications of banks thus facilitating inter-operability in P2B payments.(SOURCE: RBI)

**DATA ANALYSIS**

**Number Of Bhim App Downloads**

Android: 38.8 million till 3rd Jan, 2019, IOS : 1.93 million till 3rd Jan, 2019

Month	No. of Banks live on BHIM	Volume (in Mn)	Amount (Rs. in Cr.)	Month	No. of Banks live on BHIM	Volume (in Mn)	Amount (Rs. in Cr.)
18-Dec	128	17.06	7,589.19	17-May	44	3.976	1306.73
18-Nov	128	17.35	7,981.82	17-Apr	44	3.187	1002.15
18-Oct	128	18.27	8,206.37	17-Feb	44	1.97	623.15
18-Sep	102	16.33	7,064.86	17-Jan	35	1.718	356.5
18-Aug	99	16.5	6,872.57	16-Dec	31	0.043	1.85
18-Jul	99	16.42	6,692.66				
18-Jun	92	16.34	6,261.25	17-Jun	49	4.617	1486.71
18-Jan	67	9.57	3647.19				
18-Apr	89	12.6	4,972.69				
18-Mar	82	11.95	4,839.65				
18-Jan	67	9.57	3647.19				
17-Dec	65	9.066	3083.21				
17-Nov	60	8.19	2548.81				
17-Oct	59	7.632	2348.7				
17-Sep	55	7.603	2245.34				
17-Aug	55	6.807	1898.63				
17-Jul	52	5.433	1600.14				

Table-1: It Shows No. of Banks Live on Bhim, Its Volume and Amount Transacted Since 2016 To Dec 2018; Since 2019 Data Is Mention Above The Table.(Source: Npci, Rbi)

Data for the period	UPI*(volume (M)	value(cr)			
16-Dec	2	7	17-Sep	30.8	52.9
17-Jan	4.2	16.6	17-Oct	76.8	70.3
17-Feb	4.2	19	17-Nov	104.8	96.4
17-Mar	6.2	23.9	17-Dec	145.5	131.4
17-Apr	6.9	22	18-Jan	151.7	155.4
17-May	9.2	27.7	Feb-2018 Total	171.2	191
17-Jun	10.2	30.7			
17-Jul	11.4	33.8			
17-Aug	16.6	41.3			

Table-2: (The above table shows the UPI Volume and amount transacted through UPI solutions till March 2018, since the data is provisional so it can be again consider through the source taken for further research) (Source: - NPCI, RBI)

**BENEFIT OF THE BHIM APP**

1. It is all in one app for all the bank accounts, unlike the other mobile wallets, it doesn't require the same app to be with the other party for transaction, i.e. no separate apps are require.
2. No internet connectivity is require to transfer the funds from one bank to another.
3. It is government – backed app which makes it secure and more reliable inn cashless payment system.
4. It has three level authentications which makes customer more secure.

**THE POLICY IMPLICATIONS SURROUNDING THE DIGITAL PAYMENT ECOSYSTEM**

The use of digital technologies requires higher-order cognitive, socio-emotional, and technical skills that help respond to fast-changing technologies and their adoption at scale. (Source-2016 'World Development Report') The Movement of information across borders is crucial to the operation of the digital economy. Security and data protection are of paramount importance. Merely restricting digital flow is not likely to guarantee the same. The digital economy is heavily based on intellectual property, we should enforce strict protection to patents and copyrighted work, whether produced in India or elsewhere. There should be conscious effort by product/service designers, developers and project managers to ensure that digitization does not leave behind masses and create a massive digital divide. It is time government take notice of this and improves their services and programmes for digital inclusion of the society at large.

**CONCLUSION**

Building best of class payment and settlement systems for a 'less-cash' India through responsive regulation, robust infrastructure, effective supervision and customer centricity has been possible with BHIM app. Digitization helps in removal black money from the system as transactions are made digitally which can be easily monitored. It helps in increasing revenue as government can monitor the sales and taxes efficiently. It paves the way to E- governance which is a quicker, safe and more efficient alternative to traditional Governance. The digital economy has lot of potentials to enhance job opportunities in new markets as well as increasing employment opportunities in some of the existing occupations in the Government.

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**EVALUATION OF CPO COMMODITY FUTURES MARKET IN INDIA WITH SPECIAL REFERENCE TO MCX****Dr. K. Prabhakar Rajkumar<sup>1</sup> and M. Thilaga<sup>2</sup>**Associat Professor<sup>1</sup> and Research Scholar<sup>2</sup>, Department of Commerce, Periyar University, Salem

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**ABSTRACT**

India is the one of the largest importer of Crude Palm Oil (CPO) in the world. India is dependent on palm oil imports for over 30% of its annual edible oil requirement and more than 65% of India's annual edible oil imports. When the Europeans reached Africa to explore the continent around the 15th century, they discovered palm tree and that was the time the rest of the world got introduced with it. The cultivation of palm spread throughout the world and in the 19th century palm oil began to trade. As late as in the 20th century, oil palm tree was introduced into Malaysia and palm oil started to get produced commercially in 1917. With time Malaysia developed as a dominant player in the world scenario and is currently the largest producer of palm oil in the world. Palm oil is basically an edible oil and almost 90% of the world production is used in for this purpose. The rest 10% of production accounts to the industrial uses. It is used as a substitute for cocoa butter and butter flat. This oil has a unique feature of remaining stable in a good range of temperatures and is often used to fry foods. Hence the researcher has plans to evaluate the CPO commodity in futures market particularly in Multi Commodity Exchange (MCX).

*Keywords: Crude Palm Oil, Futures Market, Daily data, MCX.*

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**INTRODUCTION**

Trading in commodities futures has a long history. Though the modern trade in commodity futures could trace its origins back to the 17th century in Osaka, Japan, there is evidence to suggest that a form of futures trading in commodities existed in China 6000 years earlier. Organized trading on an exchange started in 1848 with the establishment of the Chicago Board of Trade (CBOT).

The first milestone in the 125 years rich history of organized trading in commodities in India was the constitution of the Bombay Cotton Trade Association in the year 1875. India had a vibrant futures market in commodities till it was discontinued in the mid 1960's, due to war, natural calamities and the consequent shortages.

**RECENT DEVELOPMENTS IN INDIA**

The advent of economic liberalization helped the cause of laying emphasis on the importance of commodity trading. By the beginning of 2002, there were about 20 commodity exchanges in India, trading in 42 commodities, with a few commodities being traded internationally.

Commodity futures contracts and the exchanges they trade in are governed by the Forward Contracts (Regulation) Act, 1952. The regulator is the Forward Markets Commission (FMC), a division of the Ministry of Consumer Affairs, Food and Public Distribution. In 2002, the Government of India allowed the re-introduction of commodity futures in India. Together with this, three screens based, nationwide multi-commodity exchanges were also permitted to be set up with the approval of the Forward Markets Commission. In terms of market share, MCX is today the largest commodity futures exchange in India, with a market share of close to 70%. NCDEX follows with a market share of around 25%, leaving the balance 5% for NMCE.

**FEATURES OF COMMODITY FUTURES****1. Organized**

Commodity Futures contracts always trade on an organized exchange, e.g. NCDEX, MCX, etc in India and NYMEX, LME, COMEX etc. internationally.

**2. Standardized**

Commodity Futures contracts are highly standardized with the quality, quantity, and delivery date, being predetermined.

**3. Eliminates Counterparty Risk**

Commodity Futures exchanges use clearing houses to guarantee that the terms of the futures contract are fulfilled. The Clearing House guarantees that the contract will be fulfilled, eliminating the risk of any default by the other party.

**4. Facilitates Margin Trading**

Commodity Futures traders do not have to put up the entire value of a contract. Rather, they are required to post a margin that is roughly 4 to 8% of the total value of the contract (this margin varies across exchanges and commodities). This facilitates taking of leveraged positions.

**5. Closing a Position**

Futures markets are closely regulated by government agencies, e.g. Forward Markets Commission (FMC) in India, the Commodity Futures Trading Commission in (CFTC) USA, etc. This ensures fair practices in these markets.

**6. Regulated Markets Environment**

Commodity Futures contracts are highly standardized with the quality, quantity, and delivery date, being predetermined.

**7. Physical Delivery**

Actual delivery of the commodity can be made or taken on expiry of the contract. Physical delivery requires the member to provide the exchange with prior delivery information and completion of all the delivery related formalities as specified by the exchange.

India is basically a net importer of the palm oil. It never had a production history in context of this oil. But it does have a vast palm oil consumption and import background. India produces around 70000 tons of palm oil annually, which stands at approximately 0.2% share in the world's total production. Kerala is the largest palm producing state in India with 30% share in the total production figures of the country. Among the companies indulged in the production of palm oil, Godrej emerges as a leader with the same amount of production as Kerala.

Indian palm oil consumption hovers around 3.7 million tons, which is a much bigger quantity as compared to the production figure

**Why is Crude Palm Oil a wise investment for an Indian trader?**

- India is the one of the largest importer of Crude Palm Oil in the world. India is dependent on palm oil imports for over 30% of its annual edible oil requirement and more than 65% of India's annual edible oil imports.
- Crude Palm Oil futures contract was launched on MCX platform in 2004 and has witnessed considerable volatility since its launch.
- Food processors can hedge ingredient prices for a product that will be purchased at a later date.
- Volatility in prices arising due to changing supply-demand scenario necessitates hedging to cover price risk.
- CPO futures are ideal for price risk management needs of the processors, traders, physical participants and end users.
- The Crude Palm Oil contract is highly liquid and provides easy entry and exit to a speculator. Thus the Crude Palm Oil contract provides space for every investor category.

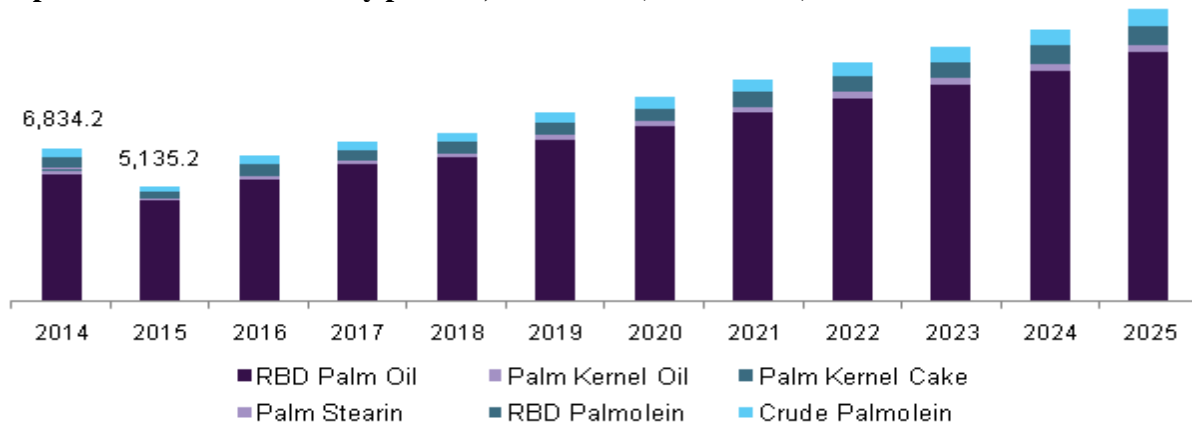
**INDUSTRY INSIGHTS**

Indonesia needs to find an alternative fuel to substitute diesel in their power plants in order to reduce the use of nonrenewable energy sources. The Indonesian government has a target to reduce oil fuel consumption while improving the efficiency of energy utilization. Crude palm oil is proposed to be used for this substitution.

Palm oil market size in India was valued at USD 5.16 billion in 2015. Increasing demand for edible oils owing to the burgeoning population and improving economic conditions is anticipated to remain the key growth driving factor over the forecast period.

The industry in India presents massive potential for growth since the government has allowed 100% FDI in plantation and has also pledged huge financial aid to farmers in upcoming years. This development is likely to encourage domestic cultivation landscape and generate greater profit margins and opportunities for companies.

**Indian palm oil market revenue by product, 2014-2025 (USD Million)**



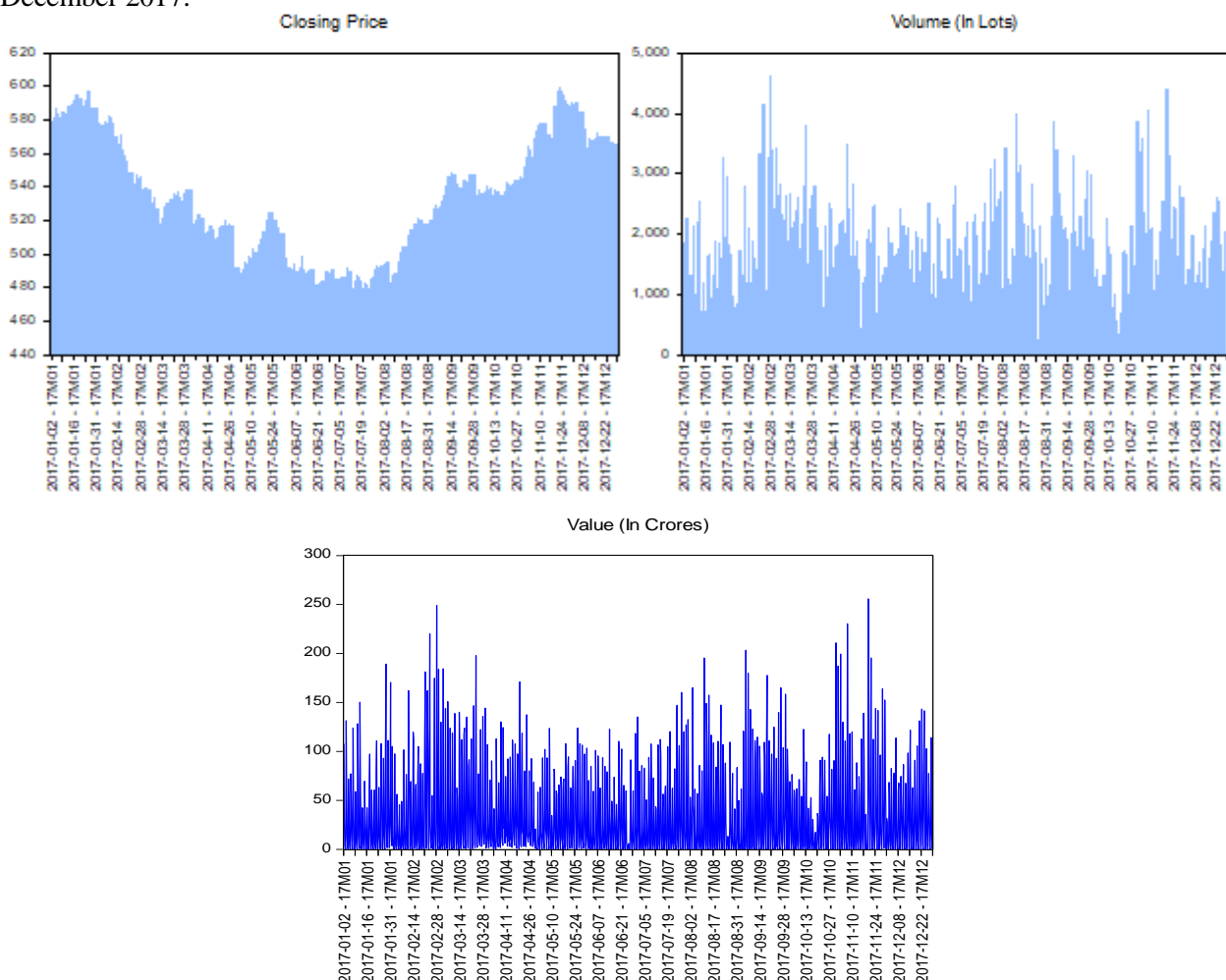
<https://www.grandviewresearch.com/industry-analysis/indian-palm-oil-market>

**REVIEW OF LITERATURE**

Petr Procházka Vladimír Hönič (2018) conduct an economic analysis of the replacement of diesel by crude palm oil. To predict future prices, a time series analysis is conducted using AutoRegressive Integrated Moving-Average method. A financial analysis of a specific project (0.75-MW power plant) is conducted using static financial indicators (payback period, return on investment). Results show that replacing diesel with crude palm oil may be profitable. This is especially true for the proposed prospects of diesel price evolution. Analysis shows that the price of crude oil, which is the main factor in the pricing of diesel, may go up. Also, recently Indonesian currency depreciated against the US dollar, which also implies a higher cost of diesel.

**EVALUATION OF CPO COMMODITY FUTURES MARKET IN MCX**

Here the researcher has taken one year daily data particularly Closing Price, Volume of commodity and Value of commodity for evaluation of CPO futures commodity in MCX. The daily data has taken from January 2017 to December 2017.





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When comparing to all the twelve months of the year of 2017 February ,September, October, November and December months has shown positive fluctuation in Closing price, Volume and Value. But the month of March, April, May, June, July, and August has shown negative fluctuations.

### **CONCLUSION**

Malaysia developed as a dominant player in the world scenario and is currently the largest producer of palm oil in the world. Palm oil is basically an edible oil and almost 90% of the world production is used in for this purpose. A mountain of bad debt in India's banking system has led to a prolonged credit crunch that has been inflicting most pain on small- and medium-sized enterprises have also been hit after India raised tax on inbound refined palm oil cargoes to 54 percent from 15 percent in mid-2017 funds for import duty is a nightmare. Had import duty been at last year's level, people would have raised imports and slashed imports by a third due to the credit crunch. A slowdown in Indian demand, due to higher import duties and Malaysia's reinstatement of a crude palm oil export tax, had contributed to the recent fall-off in prices. palm oil futures hit their lowest since July 2016 at 2,238 ringgit a tonne. Therefore, the government in determining the fare of export duties should be expected to pay attention to the interests of palm oil business actors, domestic consumers and consumers abroad in order to obtain maximum profit.

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**STUDY ON THE IMPACT OF THE MCSs AND FDIs TO THE HOST COUNTRY IN RESPECT TO ECONOMIC DEVELOPMENT****Surajkumar Dubey**Assistant Professor, Thakur College of Science and Commerce, Mumbai

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**1. ABSTRACT**

*This is an informative research paper emphasizes on the impact of Multi-National Corporations (MNC) and Foreign Direct Investment (FDI) on Indian Economy. MNCs have been integral part of various Economies and have been Acting as acting as catalyst and growth engine for Economic development. The primary aim and objective of this paper is to understand concepts of FDIs and MNCs, legal implications and find the impact of MNCs and FDI in the Economic Growth of Indian Economy. Research conducted under this study has properly highlighted various negative and positive impacts on the economy of a country. However the benefit derived are much more then negative effects.*

*Keywords: Multinational Corporations, Foreign Direct Investment, FDIs and MNCs Impact on Economy.*

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**2. OBJECTIVE OF STUDY**

1. To understand the concept of MNCs and FDIs
2. To understand mechanism and law Governing the FDIs and MNCs in India.
3. To find out the impact of FDIs and MNCs on Indian Economy.

**3. INTRODUCTION**

Multinational corporations, are business organizations who perform business activities in more than one or two countries, it represent both economic motives of its owners as well as serving as organizational mechanism by which different social and political systems confront themselves. As a large and rapidly expanding sector of the world economy is equally characterized by a revolutionary new system of production and accumulation in a world scale. These states are categorized by the world economic powers to maintain the centre and periphery relations. These states include Africa, Asia and the Latin America. The two concepts, Multinational Corporations (MNCS) and Foreign Direct Investment (FDI) are interrelated intertwined and in an actual sense they go hand in hand. In other words, there exist an umbilical cord relationship between MNCS and FDI simply because in specific and numeric terms. It should be noted for clarify that workers and element of technical knowledge also move with the flow investment capital beyond national boundaries. These flows substantially affect the product of goods and services, employment opportunities, and the distribution of output in the various part of the world. FDI is generally an integral part of the global corporate strategy for MNCS.

**4. HISTORY OF MNCS AND FDIS**

The origin of modern MNCs/FDI dates back to Europe's great trading companies. It started prominently with Dutch East India Trading Company in the 19th century Industrial Revolution and Capitalism in Europe, the exports of capital and production technology to pre-industrial territories of Africa, Asia and Latin America were championed by the biggest industrial powers, notably Britain, France, Germany and Italy. In the early 20th century the United States sought one competition of the European economy in the export of production technology and foreign investment. Subsequently, the corporations of the U.S, Japan and the European States increased fierce criss-crossing FDI strategies America's increased her investment venture in Western Europe. American FDI in petroleum sector increased in the Middle East and other oil export countries, including Nigeria. FDI "is a way of penetrating and establishing control over another social unit by means of capital export. It usually takes the form of establishing a wholly owned subsidiary firm, the large MNCs obviously being the investors in other words, FDI is a mechanism used by the corporation to penetrate foreign market and obtain their resources. The MNCs are interested in less Developed Countries (LDCs). For instance, official source have noted that American Companies invested well over 87 billion in Nigeria's Petroleum Sector. The USA has described Nigeria as one of the four priority counties in the world along with Columbia Ukraine and Indonesia.

**5. COMPLIANCE UNDER RBI/FEMA**

Under FDI, overseas money, either by an individual or entity, is invested in an Indian company. According to Organization for Economic Co-operation and Development (OECD), an investment of 10% or above from overseas is considered as FDI. In India, foreign direct investment policy is regulated under the Foreign Exchange Management Act, 2000 governed by the Reserve Bank of India. One can invest in India - either under Automatic Route which does not require approval from RBI or under Government Route, which requires prior

approval from the concerned Ministries/Departments via a single window - Foreign Investment Facilitation Portal (FIFB) administered by the Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce and Industry, Government of India. Similarly, if the company sells products or services in India and has an office in India, it will have to comply with Indian tax laws. Similarly, it will be required to comply with local regulations if it has an office (such as a Shops and Establishment Registration).

## **6. IMPORTANCE OF FDIS AND MNCS IN INDIA**

### **Importance of FDI**

While theoretical models imply that FDI is beneficial for a host country's development a belief widely shared among policymakers the empirical evidence does not support this view. This paper bridges the gap between theoretical and empirical literature with a model and calibration exercises that examine the role of local financial markets.

Over the last two decades, the determinants of economic growth have attracted increasing attention in theoretical and applied research. Despite the lack of a unifying theory, there are several partial theories that discuss the role of various factors in determining economic growth. Investment and human capital are the main source of growth in several endogenous growth models as well as one of the key extensions of the neo-classical growth model. Innovation and R and D activities can play a major role in economic progress increasing productivity and growth. This is due to the increasing use of technology that enables introduction of new and superior products and processes. Other determinants of economic growth are economic policies and macro-economic conditions. Economic policies can influence several aspects of an economy through investment in human capital and infrastructure, improvement of political and legal institutions and so on. A stable macro-economic environment may favour growth, especially, through reduction of uncertainty, whereas macroeconomic instability may have a negative impact on growth through its effects on productivity and investment.

Foreign Direct Investment (FDI) has recently played a crucial role of internationalising economic activity and it is a primary source of technology transfer and economic growth (Sahoo, Mathiyazhagan and Parida, 2002). FDI plays an extraordinary and growing role in global business. It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technology, products, skills and financing for a host country or the foreign firms which received the investment, it can provide a source of new technologies, capital, processes, products, organisational technologies and managerial skills and as such can provide a strong impetus to economic development.

(Shiralashetti and Hugar, 2009). Bashir (1999) examined the relationship between FDI and growth empirically in some Middle East and Northern Africa (MENA) countries. The study found that FDI leads to economic growth; the effect however varies across regions and over time. Anita Ghatak and Ferda Halicioglu (2006) also agree that FDI has a positive spill over effects on economic growth and development. So, there are several determinants of economic growth and this paper has analysed the impact of FDI on economic growth in India.

After independence, the Government of India recognised FDI as an important supplement to domestic savings for the development of country and in 1972, government of India decided to permit wholly owned subsidiaries but due to restrictiveness of government policies, FDI remained remarkably low till the 1990s. A real trust is yet to begun with the announcement of the economic reforms measures taken since July 1991. The series of economic reforms have strengthened the economy and expected to assume a much larger role in catalysing Indian economic development.

Reaching to changes in technologies, growing liberalisation of the national regulatory framework governing investment in enterprises and changes in capital markets, profound changes have accrued in the size, scope and methods of FDI. New information technology systems decline in global communication costs have made management of foreign investments and far easier than in the past. The sea changes in trade and investment policies and the trade policy and tariff liberalisation, easing of restrictions on foreign investment and acquisition in India and the deregulation and privatisation of many industries has probably been the most significant catalyst for FDI's expanded role

### **Importance of MNCs**

Promotion Foreign Investment: In the recent years, external assistance to developing countries has been declining. This is because the donor developed countries have not been willing to part with a larger proportion of their GDP as assistance to developing countries. MNCs can bridge the gap between the requirements of foreign capital for increasing foreign investment in India. The liberalized foreign investment pursued since 1991,

allows MNCs to make investment in India subject to different ceilings fixed for different industries or projects. However, in some industries 100 per cent export-oriented units (EOUs) can be set up. It may be noted, like domestic investment, foreign investment has also a multiplier effect on income and employment in a country.

Non-Debt Creating Capital inflows, in pre-reform period in India when foreign direct investment by MNCs was discouraged, we relied heavily on external commercial borrowing (ECB) which was of debt-creating capital inflows. This raised the burden of external debt and debt service payments reached the alarming figure of 35 per cent of our current account receipts. stage of making profits to repatriate Thus, MNCs can play an important role in reducing stress strains and on India's balance of payments (BOP).

Technology Transfer, another important role of multinational corporations is that they transfer high sophisticated technology to developing countries which are essential for raising productivity of working class and enable us to start new productive ventures requiring high technology. Promotion of Exports, with extensive links all over the world and producing products efficiently and therefore with lower costs multinationals can play a significant role in promoting exports of a country in which they invest. For example, the rapid expansion in China's exports in recent years is due to the large investment made by multinationals in various fields of Chinese industry.

Investment in Infrastructure, with a large command over financial resources and their superior ability to raise resources both globally and inside India it is said that multinational corporations could invest in infrastructure such as power projects, modernisation of airports and posts, telecommunication.

### **7. NEGATIVE IMPACT OF FDIS AND MNCS IN INDIA**

Though MNCs confer several benefits on the developing countries, they also create some problems for them. The more prominent amongst them can be described as follow

Disturbing the plan priorities, the MNCs are profit oriented. They show a strong tendency to take up the production of those commodities in which they can earn a high profit margin. They ignore the production of more important commodities if they do not give them the required profit margin. This results into the allocation of resources to the production of low priority goods. The local producers also show a tendency to enter into the low priority industries if they are more profit earning.

Inappropriate technology, the MNCs are accustomed to use a particular type of technology which is suitable for conditions in developed countries. They bring that technology to the developing countries, but that technology is not suitable for the developing countries. There is excessive supply of labour in developing countries. The technology introduced by MNCs is not proper for absorbing labour. It aggravates the problem of unemployment.

Excessive profits, most of the MNCs earn excessive profit by selling their products at very high prices. A large part of the profit is sent by the MNCs to their home countries. The host country has to provide foreign exchange to the MNCs to enable them to remit the profit to the Home country. Discrimination in staff. often the MNCs give a cordial treatment to their own persons & a step motherly treatment to the staff belonging to the host country. This creates discontent amongst the staff & labour. Over exploitation of resources, the aim of an MNC is to maximize profit in shortest possible period. They do not care for the long run effects of their activities. They use the productive resources at a very fast rate & finish them. They do not care to renew or replace the used resources. Indifference to social cost, the MNCs are not very particular about controlling the social costs like pollution or loss of life in the event of an accident. They are careless in maintaining the required safety measure.

Political pressure: The MNCs often use their money power for bringing pressure upon the government & political parties of the host countries. They interfere in the administration of the developing countries.

### **Negative effects of FDI**

Exploitation, lax labour laws combined with unemployment in the developing countries leads to exploitation of workers by multinational corporations. They shift the manufacturing base from higher income nations to lower ones in order to save money nevertheless the working conditions at the new places are anything but good. Draining of money, in spite of foreign direct investment coming into the country by the company is basically deployed to earn profits from the native customers. Therefore, the net amount earned is transferred to the parent nation. In addition, the human resources are forced to work for long hours with the absence of health insurance. Loss of business for local companies, international corporations bringing in FDI are awash with funds compared to the local companies. The latter is forced to play second fiddle or wind up after some time because they do not

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have the required financial muscle. It is an unfortunate situation as the country can never develop a local industrial base.

### **8. CONCLUSION**

Research shows that an increase in FDI and MNCs leads to higher growth rates in financially developed countries compared to rates observed in financially poor countries. Local conditions, such as the development of financial markets and the educational level of a country, affect the impact of FDI on economic growth. Policymakers should exercise caution when trying to attract FDI that is complementary to local production. The best connections are between final and intermediate industry sectors, not necessarily between domestic and foreign final goods producers. FDI is beneficial in industries requiring the infusion of cutting-edge technologies from the high-income countries. It can only be permitted when the local companies are competitive to ensure a level playing field.

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**APPRAISAL AND ASSESSMENT OF POLICY INITIATIVES OF GOVERNMENT OF INDIA  
MEDIA & ENTERTAINMENT: CHALLENGES AND ROAD AHEAD****Subhashini Iyengar**Assistant Professor, Department of Commerce, SIWS College, Wadala

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**ABSTRACT**

*One of the sunrise sector for the economy today is the Indian Media and Entertainment industry. Popularly known as (M&E) industry, this sector is witnessing high growth year after year due to immense backing by tremendous consumer demand, increased spending, rising TRP's and improving advertising revenues, all contributing significantly to the GDP. Like most dominant sectors, the M & E industry has also been largely driven by increasing digitisation which has been the "buzz word" changing the face of this sector. The Indian advertising industry is projected to be the second fastest growing advertising market in Asia after China.*

*The key reasons for the upward trend graph in this sector has predominantly been growing young population, high penetration and supporting Government policies like digitising the cable distribution sector to attract greater institutional funding, increasing FDI limit from 74 per cent to 100 per cent in cable and DTH satellite platforms, and granting industry status to the film industry for easy access to institutional finance to name a few reforms as a paradigm shift bringing radical change and transformation.*

*. The paper aims at examining the latest trends highlighting the policy reforms in the M& E sector and their implications on the economy using a benchmark strategic management tool called SWOT- thereby measuring the impact of the policies on the industry- appraisal and assessment as also the challenges & the road ahead.*

*Keywords: TRP, FDI, SWOT, GDP, Strategic Management tool.*

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**INTRODUCTION**

The Indian Media and Entertainment industry includes Film, Television, Print, Digital media, Animation and VFX, Radio, Gaming, Events, Out-of-Home, Sports, Theme Parks and other media. The key highlights of the policies that have been the forefront to motivate and monitor guide the performance of the sector were as follows:-

- Advertising FDI was permitted up to 100% through the automatic route
- Films FDI in all film-related activities such as film financing, production, distribution, exhibition, marketing etc. was permitted up to 100% for all companies under the automatic route
- In TV software production, 100% FDI was permitted.
- Cable networks FDI limit for cable networks was up to 49% inclusive of both FDI and portfolio investment. Companies with a minimum 51% paid up share capital held by Indian citizens were eligible for providing cable TV services under the Cable Television Network Rules, 1994
- In case of Direct-to-home Maximum 49% foreign equity allowed including FDI/NRI/FII .Within the foreign equity, FDI component was not allowed to exceed 20%
- FM radio - Total foreign investment including FDI by OCB/NRI/PIO etc., portfolio investments by FIIs was permitted to the extent of not more than 20% of the paid up equity in the entity holding.
- Up to 100% FDI was permitted in publishing/printing scientific and technical magazines, periodicals and journals.
- In the news and current affairs category, such as newspapers, FDI was allowed up to 26% .

**LAWS THAT GOVERN THE FUNCTIONING OF THE M&E SECTOR**

**Laws governing M& E sector include** the Telecom Regulatory Authority of India -"TRAI" Act 2000

The Cable Television Network (Regulation) Act, 1994

**Prasar Bharati (Broadcasting Corporation of India) Act, 1990**

**Cinematograph Act 1952**

**Dramatic Performances Act to the Vernacular Press Act**

The Press Council of India Act, 1978

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**SWOT ANALYSIS OF THE SECTOR**

The sector witnessed a change in policies, most of them favoring the players of Media & Entertainment, thereby making investments lucrative for foreign multinationals to invest in this sector. The presentation below exhibits the SWOT analysis for the sector on the basis of the transformed policies in the segment.

**STRENGTHS: - (S)**

1. The present valuation of the industry is at over 22.7 bn.
2. The industry is expected to grow at of almost 15%.
3. The television industry grew from Rs 594 billion to Rs 660 billion in 2017, exhibiting a growth of 11.2%.
4. Growth double than global M& E industry lead by digital, film, gaming and events.
5. Indian Television industry is four times the size of Indian Film Industry.
6. India is the second largest user of internet in the World.
7. Today, India has probably one of the most liberal investment regimes amongst the emerging economies with a conducive foreign direct investment (FDI) environment.
8. Choice based Customized channels for viewers.
9. Delightful experience for viewers
10. Prime focus not just on entertainment but infotainment.
11. Technological revolution
12. Exemption of customs duty on newsprint.

**WEAKNESSES:- (W)**

1. Liberal laws
2. Content regulation
3. Intellectual Property Rights
4. Guidelines for censorship
5. Access to unlicensed content

**OPPORTUNITIES:- (O)**

More than 70% of the people involved in the creativity team of film making are not trained professionals.

1. The Indian M& E industry accounts for only 1% of the World's M& E Industry.
2. The penetration of rural TV has grown from 175 to 782 households.
3. India's online viewing audience is expected to double in the next three years.
4. The customer is seeking technology enabled experience.
5. The FDI in cable TV and DTH has been increased to 49% . For Broadcasting Terrestrial services (FM Radio), there is no automatic route available, though 49% equity can be brought in with government approval. Thus, the monopoly of Government over the radio sector too has ended and it has been opened to the private sector making it a new and prospective market for investors. Films and televisions have been given the elevated status of industry and 100% FDI has been permitted to the film industry giving it a magnanimous scope of development. Ministry of Information and Broadcasting allows for 100% foreign investment through the government route.
6. One of the major highlights of the policy reforms also includes relaxation in the import duty on set-top boxes. The government has recently doubled the set-top boxes import duty to 20 percent. Changes have also been made in laws related to intellectual property.
7. To control the local bodies for imposing entertainment tax:- Post the implementation of GST (Goods and Services Tax), there is a no use for other tax to be implemented on the cinema exhibitor, however various states have been still imposing additional entertainment tax, so the media and entertainment industry is hoping to get rid of the local body tax.

8. Indian editions of foreign magazines dealing with news and current affairs, is capped at 26% through government approval.

**THREATS:- (T)**

1. Piracy
2. Lack of a uniform media policy for foreign investment
3. Lack of Regulatory framework
4. Privatisation
5. Joint investments through FII AND FDI.

**CONCLUSION**

With a lot of initiatives taken off-late towards the development of M&E industry, India can prove to be an investment hub. Publishing/printing of scientific and technical magazines/specialty journals/ periodicals, subject to compliance with the legal framework as applicable and guidelines issued in this regard from time to time by Ministry of Information and Broadcasting allows for 100% foreign investment through the government route.

By opening the industry to investment, the government has provided growth impetus to not only the conventional segments such as films and television but also to newer players such as gaming and advertising. It is more than evident that the Media and Entertainment industry is all set for an upward swing and will certainly achieve an all-time high. The Indian Media and Entertainment (M&E) sector is expected to cross the \$40 billion mark by 2021 growing at compounded annual growth rate (CAGR) in excess of 10 per cent. M&E industry has started to witness transformation with growing importance on the digital media. The industry continues to look for constant support and encouragement in the form of reforms from the Government in the sector.

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## GROWTH OF FMCG SECTOR IN INDIA

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### ABSTRACT

*The FMCG sector in India has seen an unprecedented growth, particularly in mid 2018, following the implementation demonetisation and GST. This industry has expanded by 11 percent as compared to 2017. In spite of high input prices and resulting rise in prices of the products, the industry is blooming on a large base. The industry experts believe that as compared to the rural sector, urban areas will outpace the consumer base. The present paper thus focuses on the consumer preferences with regards to the FMCG products. For the present research, 53 respondents were interviewed. From the responses given by them it was seen that Patanjali products are more preferred as compared to other FMCG products.*

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### A) INTRODUCTION

Fast-moving Consumer Goods (FMCG) is the 4<sup>th</sup> largest sector in the Indian economy with Household and Personal Care accounting for 50 percent of FMCG sales in India. Growing awareness, easier access and changing lifestyles have been the key growth drivers for the sector. The urban segment (accounts for a revenue share of around 55 %) is the largest contributor to the overall revenue generated by the FMCG sector in India.

The Retail market in India is estimated to reach US\$ 1.1 trillion by 2020 from US\$ 840 billion in 2017, with modern trade expected to grow at 20 – 25 % per annum, which is likely to boost revenue of FMCG companies.

### B) RECENT DEVELOPMENT AND INVESTMENTS IN FMCG SECTOR

The Government of India has allowed 100 percent Foreign Direct Investment (FDI) in food processing and single brand retail and 51 percent in multi brand retail sector. FMCG sector has witnessed highly flow of FDI inflows of US\$ 13.63 billion, during April 2000 to June 2018. Some of the recent developments in FMCG sector are as follows –

- (i) Patanjali will spend US\$ 74.72 million in various food parks in Maharashtra, Madhya Pradesh, Assam, Andhra Pradesh and Uttar Pradesh.
- (ii) Dabur is planning to invest Rs. 250 crore in FY19 for capacity expansion and is also planning to make acquisitions in the domestic market.
- (iii) In May 2018, RP – Sanjiv Goenka Group created an Rs. 1 billion (US\$ 14-92 million) venture capital fund to invest in FMCG start ups.

### C) OBJECTIVES OF THE STUDY

With the aim of analysing the growth of FMCG sector in India, the objective of the present paper is to study the marketing and financial segments of the different companies in FMCG sector.

### D) DATA AND METHODOLOGY

To analyse the growth of FMCG sector, several websites were surfed. People's perception on the growth was analysed using a structured questionnaire comprising of 7 questions, where total 53 respondents were interviewed. The responses were then analysed using graphical representation method and observations were drawn to fulfil the objectives of the present research study.

### E) RESEARCH FINDINGS

India is a very diverse market, therefore when it comes to the growth and development of any industry, there are always a multitude of the factors which play a role in this development. FMCG is no exception. There are varieties of factors, which can potentially promote its growth. Total 53 responses were collected from different parts of Mumbai suburban region. These respondents were interviewed on different parameters persisting to growth of FMCG sector.

Category	Respondents	Percentage
18 to 24	16	30.19
24 to 30	22	41.51
30 to 38	9	16.98
38 to 44	3	5.66
Above 44	3	5.66
<b>Total</b>	<b>53</b>	<b>100.00</b>

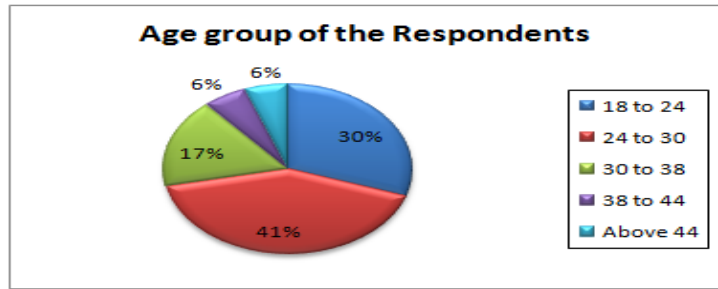


Table 1 analyses the age group of the respondents during the short survey. It was seen that nearly 41.51 percent of the respondents belonged to the age group of 24 to 30 years and around 30 percent belonged to the age group of 18 to 24 years. As the age group increases, the number of respondents in the category decreases. One interesting fact was noted that, when the senior members of the family were given the questionnaire and asked to fill the data, they suggested that the questionnaire can be filled by the younger members of the family, as with regards to consumer products, the purchasing decisions are usually made by them.

Category	Respondents	Percentage
Less than 20,000	3	5.66
20,000 to 40,000	26	49.06
40,000 to 60,000	18	33.96
Above 60,000	6	11.32
<b>Total</b>	<b>53</b>	<b>100.00</b>

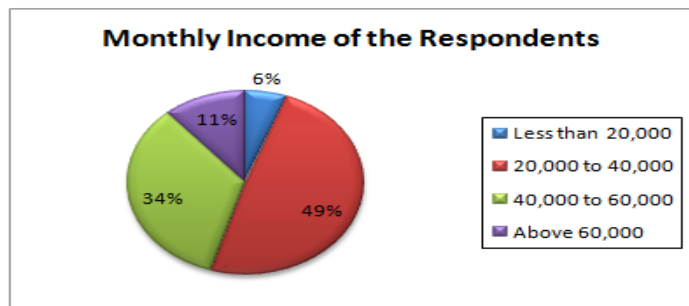
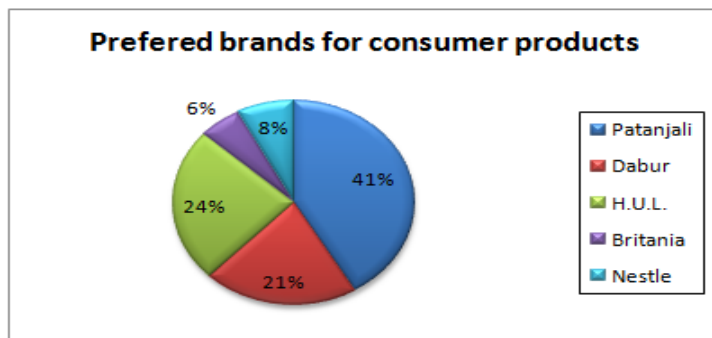


Table 2 is showing the monthly income category of the respondents. Nearly 49 percent of the respondents have monthly income of household ranging between Rs. 20,000 to Rs. 40,000. Around 34 percent of the respondents are having a monthly income ranging between Rs. 40,000 to Rs. 60,000 and 11.32 percent having more than Rs. 60,000. It can be thus inferred that, majority of the respondents are from the middle-income class.

Category	Respondents	Percentage
Patanjali	22	41.51
Dabur	11	20.75
H.U.L.	13	24.53
Britania	3	5.66
Nestle	4	7.55
<b>Total</b>	<b>53</b>	<b>100.00</b>



From table 3 it is seen that majority (41.51 percent) of the respondents prefer Patanjali products as compared to other FMCG products. The next preferred are Dabur (20.75 percent), Hindustan Uniliver Limited (24.53 percent). As compared to these companies, other FMCG products are very less preferred.

Category	Respondents	Percentage
Amazon	23	43.40
Flipkart	12	22.64
Ebay	6	11.32
Nykaa	11	20.75
Paytm	17	32.08
Jabong	18	33.96

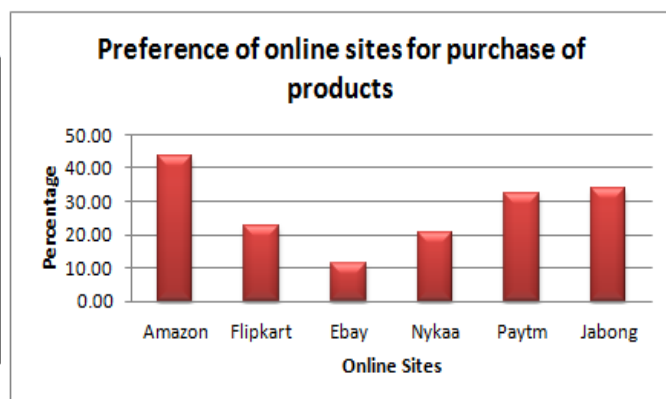


Table 4 depicts the preference of online sites for purchase of consumer products. From the survey, it was seen that nearly 43.40 percent of the respondents preferred Amazon for purchase of online products. Other favourites were Jabong (33.96 percent) and paytm (32.08 percent). Followed by these were Flipkart and Nykaa. As the respondents were allowed to select more than one option of this question, multiple responses were marked and thus the total is going above 100 percent.

Category	No.of Responses	Percentage
Yes	41	77.36
No	12	22.64
<b>Total</b>	<b>53</b>	<b>100.00</b>

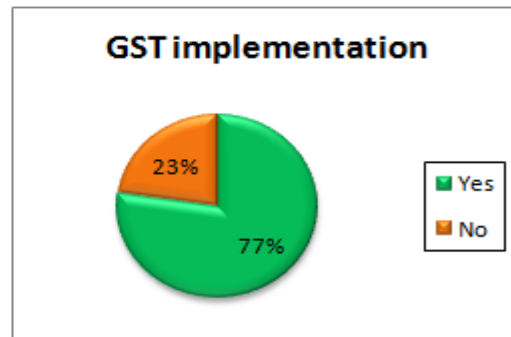


Table 5 is about the benefit of GST implementation to the FMCG companies according to the opinion of the people. Nearly 77.36 percent of the respondents said that, GST will impact the consumer goods industry widely. This is because; due to competition the mere profits of the companies are hold upon. The addition taxes will help the financial blooming of the company. At many times these companies would reduce the taxes non-uniformly without the knowledge of the companies and the customers. This leads to difference in the prices of the products. This leads to indiscrimination in the market. Such phenomena will end if uniform GST will be implemented. The prices of the product then will be purely based on the quality of the product. This will surely benefit even the consumer.

Category	No.of Responses	Percentage
Retail Outlets	42	79.25
Online Purchase	24	45.28
Home delivery	16	30.19

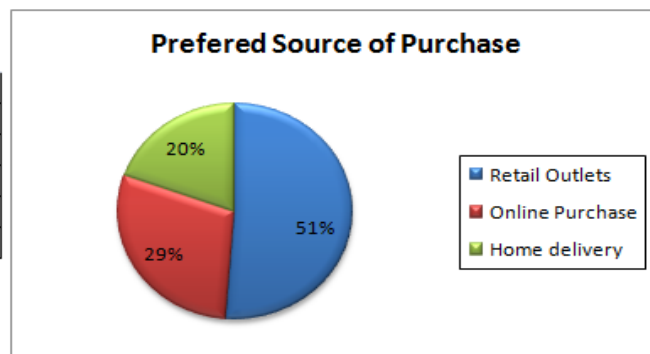
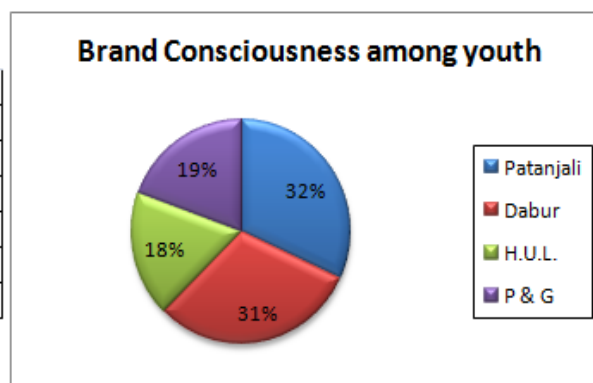


Table 5 shows the preferred source of the purchase of the consumer products by the customers. As in this question, the respondents were allowed to mark multiple responses, the total of the responses range above 100 percent. Here more than 79.25 percent of the respondents prefer to purchase the consumer goods directly from the retail outlets. Around 45 percent prefer online purchasing of the products and 30 percent believe that they would be comfortable if they are getting home delivery for the products they require.

Category	No.of Responses	Percentage
Patanjali	51	96.23
Dabur	49	92.45
H.U.L.	29	54.72
P & G	31	58.49



When the respondents were asked about their awareness about the brands, nearly 96 percent of the respondents are aware of the Patanjali products, nearly 92 percent are aware of Dabur and when it comes to Hindustan Uniliver and Proctor and Gamble nearly 55 percent people are aware of these products.

**F) OBSERVATIONS**

The technological aspect has not only helped the rural sector but the urban sector as well. There has been shift in the demand for e-commerce due to its wider reach and greater consumer convenience. E-commerce vendors like Amazon have every product available on their websites, hence eliminating the need for physical visits to retail stores. In recent times, consumers have begun exploring all the options available to them and then choose the one that is best suited to their needs. With diversified needs, the brand consciousness among customers has grown. It is seen that as the major population of the country falls in the youth category, the amount of sales of the FMCG sector has increased which have direct positive impact on the growth performance of the companies. The FMCG sector has recently been subjected to the Goods and Services Tax, GST. The declaration of the GST has been great boost for the FMCG sector. Any rate of taxation previously less than 18 % has benefited from the implementation of GST as a situation of surplus one of the best FMCG players in the Indian market has been Patanjali which has grown its sales from \$68.62 million in 2006 to \$769.23 million in 2016. It has expanded from its initial range of Ayurveda products to regular retail products.

**G) CONCLUSION**

It can be thus concluded that, FMCG sector is one of the major industries in the India market. The growth of this sector will boost the nations GDP and help the country to stand at competitive pace in the world's economy. Favourable government policies and a conscious management have managed to bring FMCG back to one of the fastest growing sector into market. It is expected that there will be economic growth in a structured manner in the long term and improve performance companies within the sector.

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INSOLVENCY AND BANKRUPTCY CODE: A NEW INDIA

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**ABSTRACT**

*Introduction: The Insolvency and Bankruptcy code is a breather in recent times as it makes both the individual & corporate insolvency process comprehensive yet simple .It encompasses within its ambit a wide array of persons ranging from a farmer to a multibillion dollar businessman, from start-ups to big corporate houses. However it is important that every individual and corporate must understand the mechanism of the code and must recognise their rights under it in order to utilize the code to its full potential. The code provides for time bond insolvency resolution/turnaround. It provides for moratorium i.e. calm period that stays all legal proceedings are on hold for easy resolution. If there is no possibility of viable turnaround within this 180 days ( plus one extension of 90 days ) as envisaged under the code only then the corporate debtor will undergo liquidation. The code as an economic reform gives an easy route to the entities to exit the market on account of business failures.*

*Purpose: The research paper studies the impact of IBC on NPA resolution and compares the recovery rate of Banks per and post IBC.*

*Methodology: Secondary data of recovery rates from NPA accounts of nationalised banks during the 10 years immediately preceding the IBC will be compared with the recovery rates from NPA accounts by the same banks post IBC to find the impact of IBC on NPA resolution*

*Keywords: IBC, NPA's, Insolvency.*

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**INTRODUCTION**

IBC, 2016 was notified by the Government of India on 28th May 2016. The Act consolidates and amends the laws relating to reorganisation and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximisation of value of assets of these persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders. IBC 2016 also altered the order of priority various payment dues; and put the payments of workmen's dues in foremost priority over Government dues. The payments of Government dues are kept after payment of financial debts owed to unsecured creditors. IBC 2016 provides the complementary ecosystem for the insolvency law, and aims to ensure smoother settlement of insolvency cases, enable faster turnaround of businesses and provide for creating a database of creditors. Before this Code, there was no single law dealing with insolvency and bankruptcy in India. Liquidation of Companies is handled by the High Courts; individual cases are dealt with under the Presidency Towns Insolvency Act, 1909 and Provincial Insolvency Act, 1920. The other laws which deal with issues include Sick Industrial Companies (Special Provisions) Act (SICA), 1985; Recovery of Debt Due to Banks and Financial Institution Acts, 1993, the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 and Companies Act, 2013. The Code consolidates these insolvency laws to bring them under one umbrella.

**NEED FOR THE STUDY**

Banking Industry in India is struggling big time when it comes to dealing with NPA accounts; the very existence of some Banks is in danger as they are now being merged with stronger banks. The various governments in the centre during the past many years have been coming out with various policies to deal with this problem. Similarly the present government came out with Insolvency and Bankruptcy code in 2016, the study aims to find out what impact IBC has created with regards to dealing with NPA's

**LITERATURE REVIEW**

**Berkowitz and White (2004)** Bankruptcy law can be divided into personal bankruptcy law and corporate bankruptcy law, which focus on the individual and the incorporate business respectively. **Robb and Robinson (2012)** and **Cerqueiro and Penas (2014)** consider personal bankruptcy to affect small businesses, because a lender might ask for personal guarantee when a small business seeks credit. **Acharya and Subramanian (2009)**, concludes that bankruptcy law measured by creditor rights or legal origin has an effect on risk-taking, the level of innovation is influenced by bankruptcy law as a more creditor-friendly code leads to lower innovation as measured by the number of patents, while also the riskiness of innovation decreases. **Cerqueiro et al. (2014)** also find that the tolerance-for-failure effect –which implies that the inventor is more likely to take risk due to better protection by a more creditor-unfriendly bankruptcy code –is dominated by the negative

credit-supply effect –which is when there is a lower availability of external financing because of the risk that the creditor has to bear under a more lenient bankruptcy code –which can lead to a decrease in innovation and its riskiness despite a more debtor friendly legal system. **Gertner and Scharfstein,(1991)** finds that a more creditor-friendly bankruptcy code has a negative effect on investments as the original investors’ fears his assets being taken over at throw away valuations **Acharya et al. (2011)** also find acquisitions to be affected by bankruptcy law. They argue that under stronger creditor protection, more diversified acquisitions are pursued by businesses, which are value reducing –as such diversifying acquisitions concern targets with high recovery value and low cash-flow risk. Moreover, they find a negative relation between creditor protection and corporate debt levels. **Davydenko and Franks (2008)** find that under different bankruptcy codes, banks adjust their lending and reorganization practices. They find that French banks –who operate under a more creditor-unfriendly bankruptcy code –require more collateral and of higher liquidity. **Qian and Strahan (2007)**, find that stronger creditor rights result in better loan terms for the debtor in respect of longer maturities and lower spreads as the creditors are assured of the return of their capital in case of default.

A lot of research has taken place across the globe on the Insolvency and Bankruptcy code to summarise the Insolvency policy adopted by various nations can be broadly classified into the below two categories

- Creditor friendly
- Not so Creditor friendly

In the first case the policy are made such that the creditors are protected legally which gives confidence to Banks and other financial Institute to give credit on liberal terms which helps the industry grow but the down side is the consistent dependence on borrowed funds and lack of owners contribution toward capital infusion. Where as in the second scenario Banks and Financial Institutes keep a close eye on the borrowers and demand a lot of formalities to be completed before seeking disbursement of loans, this effects the money supply and impacts the overall growth of industry.

**RESEARCH OBJECTIVE**

The purpose of this study to find out the impact of IBC 2016 on the management of NPA’s by public sector banks in India

**RESEARCH METHODOLOGY**

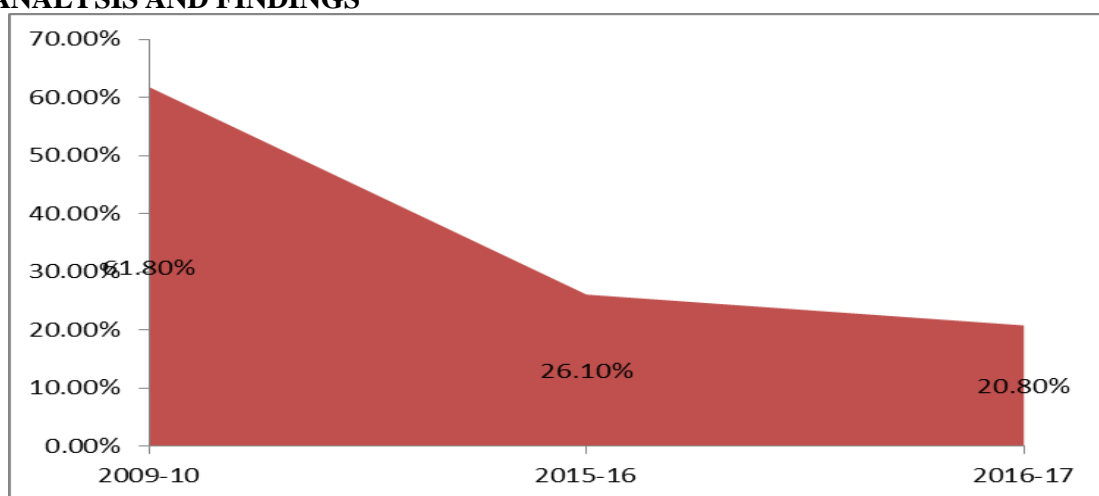
**Data Description**

Secondary data from published sources is used to analyse the effect of IBC on the NPA management of Public sector Banks

**Research Design**

NPA recovery rates during the last 10 years using various methods are compared with the NPA recovery under IBC to know the effectiveness of IBC

**DATA ANALYSIS AND FINDINGS**



**NPA recovery rates**

The recovery rate for NPA’s has been on a decline and minimum efforts were taken to revive the same. This has led to an uncontrollable situation where in Government has to infuse more than 2,00,000 Crores in the public sector Bank over the last decade

The Write –Off, The Recovery

	Bad Loans Written Off by PSB’s 2014 till Dec 2017, INR in Crores	Recovery from Written off Accounts by PSB’s 2014 till Dec 2017	Recovery rate %
UCO Bank	6087	0	0.00
India Overseas Bank	10,470	10	0.10
Allahabad Bank	9,533	257	2.70
IDBI Bank	16568	479	2.89
Corporation Bank	10,790	562	5.21
Bank of India	17,680	1,099	6.22
Bank of Baroda	10,571	915	8.66
State Bank of India	1,02,587	10,396	10.13
PNB	27,814	6,27	22.54
Canara Bank	13,917	3,284	23.34
Syndicate bank	5,363	1,535	28.82
Total	2,72,558	29,343	10.77

Indian Express

On an average PSB’s have only managed to recover 1/10<sup>th</sup> of the Loans categorised as NPA’s the rest had to be written off

	Debt (₹bn)	Estimated haircut (%)	Status
Bhushan Steel	470.0	25	Ownership transferred to Tata Steel
Essar Steel	450.0	15	Bid recd. but litigated by Numetal, ArcelorMittal
Bhushan Power	390.0	50	Bids received from JSW Steel, Tata Steel, Liberty
Alok Industries	268.7	83	CoC accepted bid by Reliance Ind
Electrosteel Steels	123.8	55	Ownership transferred to Vedanta
Amtek Auto	104.6	70	Ownership changed to Liberty House
AB G Shipyard	98.2	80	CoC recommended liquidation
Monnet Ispat	97.3	70	Ownership transferred to JSW Steel – AION
JP Infra	94.2	30	SC orders rebids
Lanco Infra	81.6	90	NCLT approved liquidation
Era Infra Engg	65.1	80	In process, delay in admission
Jyoti Structures	48.3	60	NCLT rejects bid, approves liquidation
	2,291.8	47	

The above data shows the expected recovery rate of nearly 50% from the companies which are brought under IBC as against the industry average of 10% recovery from NPA accounts, which are encouraging signs and are considered as early signals for the success of IBC

Insolvency law addressed INR 3 lakh Crore stressed assets in 2 years

Stage	No. of cases	Amount ( in Crores )
Pre- admission	3,500	1,20,000
Admitted	1,300	71,000
Mature stage		50,000
Resolutions		1,20,000

Times of India – Injeti Srinivas – Corporate Affairs Secretary

During the first two years the Insolvency Law has directly / Indirectly helped the banking system recover 3,00,000 crores from NPA/ potential NPA accounts. Many companies have repaid their dues only because of the fear of Insolvency proceedings

**FINDINGS AND CONCLUSION**

IBC as a law has added the required steam into the NPA collections in India. The initial signs are encouraging but it remains a tool which is in the process of establishing itself within the highly dynamic and unestablished India NPA management system. The cases which are being worked on by the panel will form the basis of future NPA resolution, any wrong move or any uncertain step now will hamper the entire movement.

**SUGGESTIONS**

Currently IBC is in a test phase and its success is monitored closely any lapses will not only impact the current NPA management but will derail the entire Banking industry per se. It is of utmost importance that due care is taken while implementing the IBC as any shortcomings in its implementation will proof costly in the future

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## EVALUATION OF GOVERNMENT POLICIES AND INITIATIVES ON AGRICULTURAL SECTOR AND ITS IMPACT ON FARMER'S SUICIDE

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### ABSTRACT

The economy of our country is majorly divided into three sectors viz, Primary sector (Agriculture), Secondary sector (Industry) and Tertiary sector (Service). Agriculture being the primary sector has contributed tremendously towards the GDP (Gross Domestic Product). Due the introduction of Service sector the Agricultural sector is slowly and gradually fading away. However, the Government has taken a lot of initiatives to rebuild and strengthen the Agricultural sector of India. NAP (National Agricultural Policy) '2000 is one such policy initiative taken by the government to support an uplift the agricultural sector of India. This policy was primarily initiated to support the inherent strength of Agriculture and all its allied sectors. Making optimum use of resources with respect to Agriculture will lead to a new economic era in the country. NAP, 2000 encourages showcasing the growth of extremely potential Agricultural sector of India for which rural infrastructure is needed as it will give a momentum to the Agricultural development of the country.

*Keywords: Agriculture, Sector, Service, Resources, Initiative*

### INTRODUCTION

Agriculture in India is primarily affected due to Irrigation facility, pricing policies in the region of Maharashtra which forces them to use Micro- irrigation namely sprinklers as its prime way of irrigation. Government has undertaken many initiatives to conclude the problem of Agriculture with the help of canal irrigation and well irrigation facilities. In the regions such as Pune and Nashik, well irrigation for Agriculture is considered 1.5times better than that of canal irrigation. Government has also taken initiatives other initiatives namely Buffer Stock System, Minimum support price to support the Agricultural backlog happening sue to the entrance of Service sector into the economy.

Corporate/Contract farming is one such form of concept bought in by the government to encourage private participation into the world of Agriculture. There are other Agricultural initiatives such as Procurement price, Fair Remuneration price, Commission for Agricultural costs and prices & Food Corporation of India which have been started by the government to provide common platform to the farmers to reduce Farmer's Suicide.

### FRAMEWORK OF STUDY

#### Objectives of the study

Primary Objective

1. To understand the views of the Farmers on Contract/Corporate Farming.

Secondary Objectives

- To know the reasons of Farmer's suicide.
- To know the need of the Farmers.

#### Research Methodology

The research is primary a sample survey. Random sampling method was used for the study.

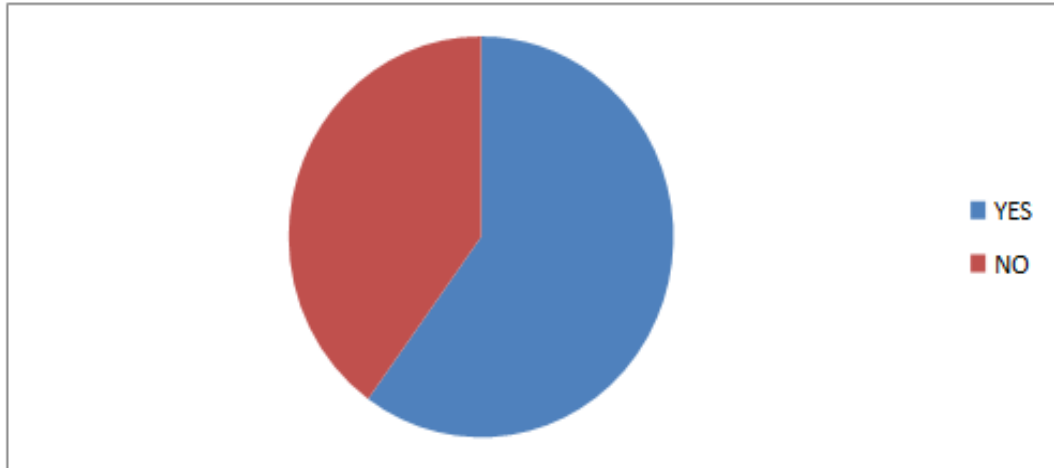
The sample size is 100 farmers.

#### Analysis of the Questionnaire

Attribute Analysis by sample

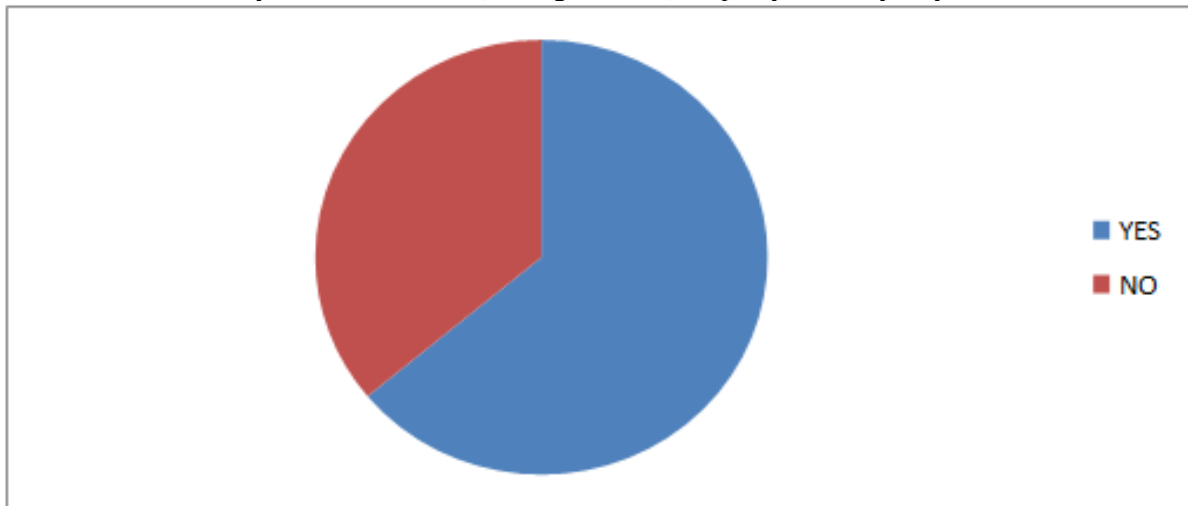
Options	Yes	No
Concept awareness	60%	40%
Help through Government Initiative	64%	36%
Difference between pre and post liberalization	64%	36%
Help in controlling Farmer's Suicide	64%	36%
Any Changes	40%	60%

Q.1. Do you know about Corporate/Contract Farming?



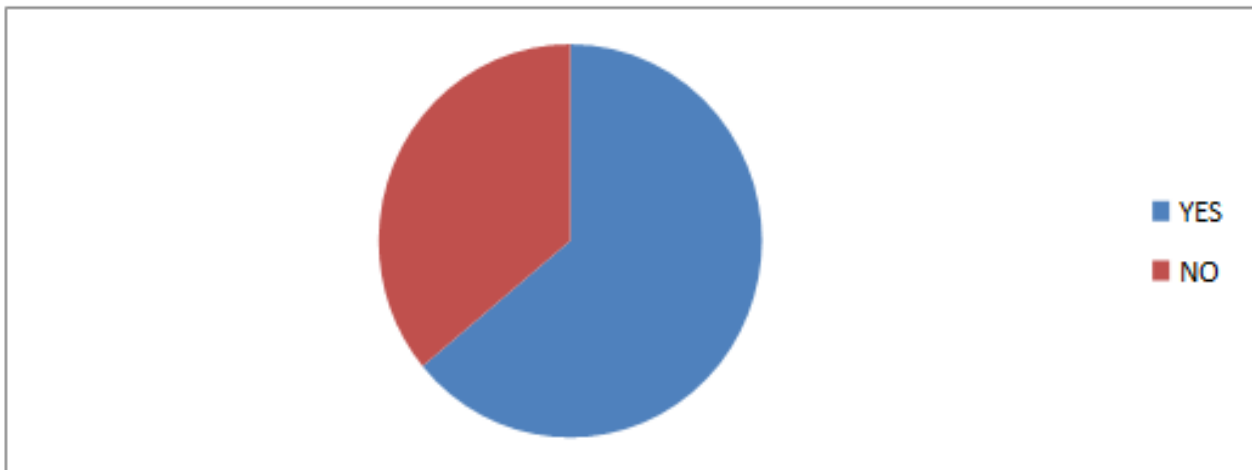
Interpretation: - As per the survey, 60% of the farmers responded in favor of knowing the concept of Corporate/Contract farming.

Q.2. Has initiatives taken by the Government (For Agriculture) helped you in any way?



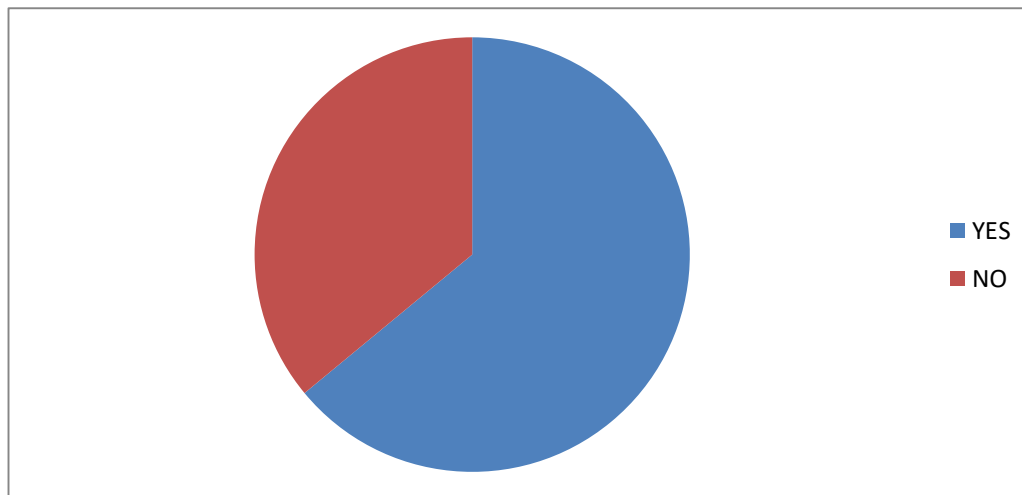
Interpretation: - According to 64% of the farmers surveyed, the initiatives taken by the government in terms of Agriculture has helped them immensely. On the other hand, 36% of the farmers surveyed, expressed that initiatives didn't prove to be any help for them.

Q.3. According to you, is there any difference in agriculture from liberalization period to post liberalization?



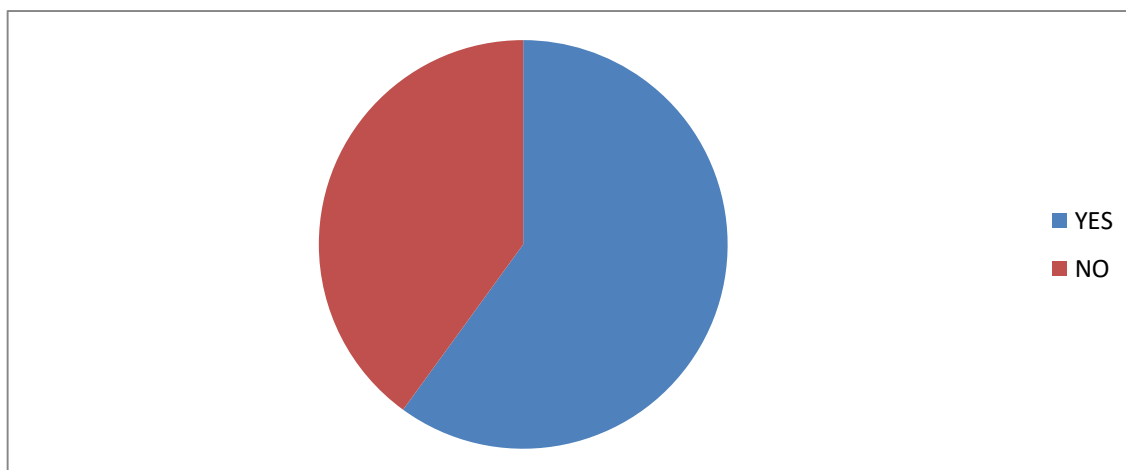
Interpretation: - According to the survey, 64% of the farmers expressed that they have experienced major changes post liberalization policies in Agricultural sector. On the contrary, 36% of the farmers think that the policies are still quite stagnant.

Q.4. Has government policies helped in controlling Farmer's Suicide?



Interpretation: - According to the survey, 64% farmers think that the new policies and the relaxation has brought a wide change in the number of farmer's suicide and it has decreased incredibly. On the other hand, 36% farmers think that there is no change in the number of suicide's of farmers presently.

Q.5. Do you want to bring about any changes in the current Agricultural policies taken by the government?



Interpretation: - According to the survey, 60% of the farmers feel that the current policies are appropriate and need no change but other 40% farmers are dissatisfied and feel there should be change in the current policies in the field of Agriculture.

#### OBSERVATION AND FINDING

Out of 100 respondents on an average 65% of the farmers were satisfied with the current policies, processes and working of the government in the field of Agriculture whereas, 35% of the farmers are still dissatisfied and want some changes in Agricultural policies in the form of relaxation in taxes and more of subsidies.

According to many farmers, number of suicides has decreased as the policies such as NAP, 2000, Contract/Corporate farming, Buffer stock system, Minimum support price etc have been in favor of the farmers.

Many of the farmers have also witnessed changes in the policies post liberalization period in India.

#### CONCLUSION

Many of the farmers had similar responses towards the policies created by the government. All the initiatives taken by the government are primarily in their favor which has proven to be beneficial for them. Some of the farmers have still not overgrown the fact of new policies brought in which has totally hampered their ideologies.

The government has majorly supported to boost the Agricultural sector in India with the help of initiatives taken by them.

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**WOMEN EMPOWERMENT: GOVERNMENT POLICIES AND PROGRAMMES****Ashwini Koyande<sup>1</sup> and Chitra More<sup>2</sup>**Assistant Professor<sup>1</sup>, Department of Information Technology, Vidyalkar School of Information Technology,  
Wadala, MumbaiAssistant Professor<sup>2</sup>, Department of Management, Vidyalkar School of Information Technology,  
Wadala, Mumbai

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**ABSTRACT**

*Empowerment in its broadest sense is the expansion of freedom of choice and action meaning thereby increasing one's authority and control over the resources and decisions that affect one's life. The choices of disadvantaged groups including women are extremely limited, both by their lack of assets and by their powerlessness to negotiate better terms for themselves with a range of institutions, both formal and informal. Women's empowerment and economic development are closely related: in one way, development alone can play a major role in driving down inequality between men and women; in the other way, empowering women may benefit development. India is among the few developing countries where gender equality and improvement in the status of women are specifically stated to be central goals of development and social policy. This paper reviews both sides of the empowerment-development nexus, and argues that the inter-relationships are probably too weak to be self-sustaining, and that continuous policy commitment to equality for its own sake may be needed to bring about equality between men and women.*

*Keywords: women empowerment, government policies, society, socio-culture, service sector*

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**OBJECTIVES**

1. To understand the concept and need of Women Empowerment.
2. To study constitutional legal provisions of Women Empowerment.
3. To find out Government Policies and Schemes for Women Empowerment.
4. To study women's contribution to the country's development.

**METHODOLOGY**

This study is descriptive in nature. In my study we have used secondary data for the purpose of this research paper. The main sources of secondary data are annual general reports, journals, magazines, newspapers and concerned websites.

**WHAT IS WOMEN EMPOWERMENT**

Women empowerment in simple words can be understood as giving power to women to decide for their own lives or inculcating such abilities in them so that they are able to find their rightful place in the society.

According to the **United Nations**, women's empowerment mainly has five components:

- Generating women's sense of self-worth;
- Women's right to have and to determine their choices;
- Women's right to have access to equal opportunities and all kinds of resources;
- Women's right to have the power to regulate and control their own lives, within and outside the home; and
- Women's ability to contribute in creating a more just social and economic order.

Thus, women empowerment is nothing but recognition of women's basic human rights and creating an environment where they are treated as equals to men.

**WHY WE NEED WOMEN EMPOWERMENT?**

Need for empowerment arose due to centuries of domination and discrimination done by men over women; women are the suppressed lot. They are the target of varied types of violence and discriminatory practices done by men all over the world. India is no different.

India is a complex country. We have, through centuries, developed various types of customs, traditions and practices. These customs and traditions, good as well as bad, have become a part of our society's collective consciousness. We worship female goddesses; we also give great importance to our mothers, daughters, sisters, wives and other female relatives or friends. But at the same time, Indians are also famous for treating their women badly both inside and outside their homes.

Indian society consists of people belonging to almost all kinds of religious beliefs. In every religion women are given a special place and every religion teaches us to treat women with respect and dignity. But somehow the society has so developed that various types of ill practices, both physical and mental, against women have become a norm since ages. For instance, sati pratha, practice of dowry, parda pratha, female infanticide, burning of wife for dowry, sexual violence, sexual harassment at work place, domestic violence and other varied kinds of discriminatory practices; all such acts consists of physical as well as mental element.

The reasons for such behaviour against women are many but the most important one are the male superiority complex and patriarchal system of society. Though to eliminate these ill practices and discrimination against women various constitutional and legal rights are there but in reality there's lot left to be done. Several self-help groups and NGOs are working in this direction; also women themselves are breaking the societal barriers and achieving great heights in all dimensions: political, social and economic. But society as a whole has still not accepted women as being equal to men and crimes or abuses against women are still on the rise. For that to change, the society's age-old, deep-rooted mindset needs to be changed through social conditioning and sensitization programmes.

Therefore, the concept of women empowerment not only focuses on giving women strength and skills to rise above from their miserable situation but at the same time it also stresses on the need to educate men regarding women issues and inculcating a sense of respect and duty towards women as equals. In the present write-up we will try to describe and understand the concept of Women Empowerment in India in all its dimensions.

## **WOMEN EMPOWERMENT IN INDIA**

### **Historical Background**

From ancient to modern period, women's condition-socially, politically and economically- has not remained same and it kept changing with times. In ancient India, women were having equal status with men; in early Vedic period they were very educated and there are references of women sages such as Maitrayi in our ancient texts. But with the coming of famous treatise of Manu i.e. Manusmriti, the status of women was relegated to a subordinate position to men.

All kinds of discriminatory practices started to take form such as child marriage, devadasi pratha, nagar vadhu system, sati pratha etc. Women's socio-political rights were curtailed and they were made fully dependent upon the male members of family. Their right to education, right to work and right to decide for themselves were taken away.

During medieval period the condition of women got worsened with the advent of Muslim rulers in India; as also during the British period. But the British rule also brought western ideas into the country.

A few enlightened Indians such as Raja Ram Mohun Roy influenced by the modern concept of freedom, liberty, equality and justice started to question the prevailing discriminatory practices against women. Through his unrelenting efforts, the British were forced to abolish the ill-practice of Sati. Similarly several other social reformers such as Ishwar Chandra Vidyasagar, Swami Vivekananda, Acharya Vinoba Bhave etc. worked for the upliftment of women in India. For instance, the Widow Remarriage Act of 1856 was the result of Ishwar Chandra Vidyasagar's movement for improving the conditions of widows.

Indian National Congress supported the first women's delegation which met the Secretary of State to demand women's political rights in 1917. The Child Marriage Restraint Act in 1929 was passed due to the efforts of Harbilas Sarada. Mahatma Gandhi called upon the young men to marry the child widows and urged people to boycott child marriages.

During freedom movement, almost all the leaders of the struggle were of the view that women should be given equal status in the free India and all types of discriminatory practices must stop. And for that to happen, it was thought fit to include such provisions in the Constitution of India which would help eliminate age-old exploitative customs and traditions and also such provisions which would help in empowering women socially, economically and politically.

### **Constitution of India and Women Empowerment**

India's Constitution makers and our founding fathers were very determined to provide equal rights to both women and men. The Constitution of India is one of the finest equality documents in the world. It provides provisions to secure equality in general and gender equality in particular. Various articles in the Constitution safeguard women's rights by putting them at par with men socially, politically and economically.

The Preamble, the Fundamental Rights, DPSPs and other constitutional provisions provide several general and special safeguards to secure women's human rights.

**Preamble**

The Preamble to the Constitution of India assures justice, social, economic and political; equality of status and opportunity and dignity to the individual. Thus it treats both men and women equal.

**Fundamental Rights:**

The policy of women empowerment is well entrenched in the Fundamental Rights enshrined in our Constitution. For instance:

- Article 14 ensures to women the right to equality.
- Article 15(1) specifically prohibits discrimination on the basis of sex.
- Article 15(3) empowers the State to take affirmative actions in favour of women.
- Article 16 provides for equality of opportunity for all citizens in matters relating to employment or appointment to any office.

These rights being fundamental rights are justiciable in court and the Government is obliged to follow the same.

**Directive Principles of State Policy**

Directive principles of State Policy also contains important provisions regarding women empowerment and it is the duty of the government to apply these principles while making laws or formulating any policy. Though these are not justiciable in the Court but these are essential for governance nonetheless. Some of them are:

- Article 39 (a) provides that the State to direct its policy towards securing for men and women equally the right to an adequate means of livelihood.
- Article 39 (d) mandates equal pay for equal work for both men and women.
- Article 42 provides that the State to make provision for securing just and humane conditions of work and for maternity relief.

**Fundamental Duties**

Fundamental duties are enshrined in Part IV-A of the Constitution and are positive duties for the people of India to follow. It also contains a duty related to women's rights:

Article 51 (A) (e) expects from the citizen of the country to promote harmony and the spirit of common brotherhood amongst all the people of India and to renounce practices derogatory to the dignity of women.

**Other Constitutional Provisions**

Through 73rd and 74th Constitutional Amendment of 1993, a very important political right has been given to women which is a landmark in the direction of women empowerment in India. With this amendment women were given 33.33 percent reservation in seats at different levels of elections in local governance i.e. at Panchayat, Block and Municipality elections.

Thus it can be seen that these Constitutional provisions are very empowering for women and the State is duty bound to apply these principles in taking policy decisions as well as in enacting laws.

**SPECIFIC LAWS FOR WOMEN EMPOWERMENT IN INDIA**

Here is the list of some specific laws which were enacted by the Parliament in order to fulfil Constitutional obligation of women empowerment:

- The Equal Remuneration Act, 1976.
- The Dowry Prohibition Act, 1961.
- The Immoral Traffic (Prevention) Act, 1956.
- The Maternity Benefit Act, 1961.
- The Medical termination of Pregnancy Act, 1971.
- The Commission of Sati (Prevention) Act, 1987.
- The Prohibition of Child Marriage Act, 2006.
- The Pre-Conception & Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994.
- The Sexual Harassment of Women at Work Place (Prevention, Protection and) Act, 2013.

Above mentioned and several other laws are there which not only provide specific legal rights to women but also gives them a sense of security and empowerment.

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**INTERNATIONAL COMMITMENTS OF INDIA AS TO WOMEN EMPOWERMENT**

India is a part to various International conventions and treaties which are committed to secure equal rights of women.

One of the most important among them is the Convention on Elimination of All Forms of Discrimination against Women (CEDAW), ratified by India in 1993.

Other important International instruments for women empowerment are: The Mexico Plan of Action (1975), the Nairobi Forward Looking Strategies (1985), the Beijing Declaration as well as the Platform for Action (1995) and the Outcome Document adopted by the UNGA Session on Gender Equality and Development & Peace for the 21st century, titled "Further actions and initiatives to implement the Beijing Declaration and the Platform for Action". All these have been whole-heartedly endorsed by India for appropriate follow up.

These various national and International commitments, laws and policies notwithstanding women's situation on the ground have still not improved satisfactorily. Varied problems related to women are still subsisting; female infanticide is growing, dowry is still prevalent, domestic violence against women is practised; sexual harassment at workplace and other heinous sex crimes against women are on the rise.

Though, economic and social condition of women has improved in a significant way but the change is especially visible only in metro cities or in urban areas; the situation is not much improved in semi-urban areas and villages. This disparity is due to lack of education and job opportunities and negative mind set of the society which does not approve girls' education even in 21st century.

**GOVERNMENT POLICIES AND SCHEMES FOR WOMEN EMPOWERMENT**

Whatever improvement and empowerment women have received is especially due to their own efforts and struggle, though governmental schemes are also there to help them in their endeavour.

In the year 2001, the Government of India launched a **National Policy for Empowerment of Women**. The specific objectives of the policy are as follows:

- Creation of an environment through positive economic and social policies for full development of women to enable them to realize their full potential.
- Creation of an environment for enjoyments of all human rights and fundamental freedom by women on equal basis with men in all political, economic, social, cultural and civil spheres.
- Providing equal access to participation and decision making of women in social political and economic life of the nation.
- Providing equal access to women to health care, quality education at all levels, career and vocational guidance, employment, equal remuneration, occupational health and safety, social security and public life etc.
- Strengthening legal systems aimed at elimination of all forms of discrimination against women.
- Changing societal attitudes and community practices by active participation and involvement of both men and women.
- Mainstreaming a gender perspective in the development process.
- Elimination of discrimination and all forms of violence against women and the girl child.
- Building and strengthening partnerships with civil society, particularly women's organizations.

The Ministry of Women and Child Development is the nodal agency for all matters pertaining to welfare, development and empowerment of women. It has evolved schemes and programmes for their benefit. These schemes are spread across a very wide spectrum such as women's need for shelter, security, safety, legal aid, justice, information, maternal health, food, nutrition etc., as well as their need for economic sustenance through skill development, education and access to credit and marketing.

Various schemes of the Ministry are like Swashakti, Swayamsidha, STEP and Swawlamban enable economic empowerment. Working Women Hostels and Creches provide support services. Swadhar and Short Stay Homes provide protection and rehabilitation to women in difficult circumstances. The Ministry also supports autonomous bodies like National Commission, Central Social Welfare Board and Rashtriya Mahila Kosh which work for the welfare and development of women. Economic sustenance of women through skill development, education and access to credit and marketing is also one of the areas where the Ministry has special focus.

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**WOMEN EMPOWERMENT INITIATIVES ARE****1. Mahila E-haat**

It is a direct online marketing platform launched by the Ministry of Women and Child Development to support women entrepreneurs, Self Help Groups (SHGs) and Non- Governmental Organisations (NGOs) to showcase products made and services rendered by them. This is a part of the 'Digital India' initiative.

**2. Beti Bachao, Beti Padhao**

This is a social campaign aimed at eradication of female foeticide and raising awareness on welfare services intended for young Indian girls.

Launched on 22 January 2015, it is a joint initiative run by the Ministry of Women and Child Development, the Ministry of Health and Family Welfare and the Ministry of Human Resource Development

**3. One Stop Centre Scheme**

It was implemented on 1st April 2015 with the 'Nirbhaya' fund. The One Stop Centres are established at various locations in India for providing shelter, police desk, legal, medical and counselling services to victims of violence under one roof integrated with a 24 hour Helpline. The toll free helpline number is 181.

**4. Working Women Hostels**

The objective of the scheme is to promote availability of safe and conveniently located accommodation for working women, with day care facility for their children, wherever possible, in urban, semi urban, or even rural areas where employment opportunity for women exist.

**5. Swadhar Greh**

The Swadhar scheme was launched by the Union Ministry of Women and Child Development in 2002 for rehabilitation of women in difficult circumstances.

The scheme provides shelter, food, clothing and care to the marginalized women/girls who are in need. The beneficiaries include widows deserted by their families and relatives, women prisoners released from jail and without family support, women survivors of natural disasters, women victims of terrorist/extremist violence etc.

The implementing agencies are mainly NGOs.

**6. STEP**

The Support to Training and Employment Programme for Women (STEP) Scheme aims to provide skills that give employability to women and to provide competencies and skill that enable women to become self-employed/ entrepreneurs.

Sectors include Agriculture, Horticulture, Food Processing, Handlooms, Tailoring, Stitching, Embroidery, Zari etc, Handicrafts, Computer & IT enabled services along with soft skills and skills for the workplace such as spoken English, Gems & Jewellery, Travel & Tourism, Hospitality, etc.

**7. Nari Shakti Puruskars**

The Nari Shakti Puruskars are national level awards recognizing the efforts made by women and institutions in rendering distinguished services for the cause of women, especially vulnerable and marginalized women.

**CONCLUSION AND SUGGESTIONS**

The women play a strategic role in the society and in the economy. The status of women in India is not even in all the times. In ancient period they enjoyed equal status with men, in the medieval period, the position of Indian women deteriorated. During British rule and after independence many efforts are being made for improving the status of women in India. The government of India, by passing timely and essential Acts and implementing rules and regulations trying to empower and strengthen the women. No doubt the government of India has many weapons to fight for women empowerment, the prompt and strict implementation is quite essential. Unless the Acts, Policies, Rules, Regulations, etc, are strictly implemented the idea of women empowerment remains unachieved. Hence the efforts of the government are still inadequate and the process of empowering women in India is a long way to go.

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**A STUDY OF SOCIAL IMPACT ON GOA TOURISM**

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**ABSTRACT**

*This study provides details of tourism in Goa and its social impacts. Tourism is not exclusively an economic phenomenon, it also involves social, cultural, political and environmental aspects. It is therefore, important to realize that any assessment of tourism impacts should not only be concerned with the tangible economic effects such as revenue and foreign exchange earnings, but also with non-economic and intangible effects, such as social and cultural ones.*

*Social impacts of tourism are the ways in which tourism is contributing to changes in value systems, individual behaviour, family relationships, collective life styles, moral conduct, creative expressions, traditional ceremonies and community organization.*

*Keywords: Crime, usage of drugs in tourism and social impact.*

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**OBJECTIVES OF THE STUDY**

1. To study the impacts of tourism on the social life of the local populace in Goa.
2. To find out ways to reduce the criminal activities carried out excessively.
3. To study in what ways can the usage of drugs can be reduced or eliminated.

**9. INTRODUCTION**

Tourism is one of the largest and dynamically developing sectors that contribute actively to the social and economic development of a state and the country as a whole.

Makan (2006) found that when locals experience different cultural practices, these increase insight and appreciation for different approaches to living and helps broaden horizons. These encounters also promote a greater acceptance to social differences.

According to Kreg (n.d.) some negative effects of tourism include unwanted lifestyle changes, alterations in the values and customs and the disruption of family life of the locals.

Often tourism development initiatives like construction of hotels, shopping complexes and pubs may develop in residential areas where tourists live, forcing locals to adapt to the changes in the physical composition of the community.

**10. POSITIVE IMPACT**

Goa is India's richest state with the highest GDP per capita – two and a half times that of the country – with one of its fastest growth rates. Tourism is Goa's primary industry: it gets 12% of foreign tourist arrivals in India.

The journey from Mumbai to Goa is now more fun and luxurious with the launch of India's first domestic luxury cruise liner Angriya.

Goa Chief Minister Manohar Parrikar and Tourism Minister Manohar Ajaonkar flagged off the Goa Tourism Development Corporation's app-based taxi service in Panaji.

As of September 2018, Goa had a total installed power generation capacity of 549.41 MW. Goa is also one of the few states in India to achieve 100 per cent rural electrification.

**11. NEGATIVE IMPACTS**

With more visitors seeking sex, drugs and booze in this western state it is inviting a backlash from locals who have grown tired of seeing their homes trashed and their women molested.

Along the shoreline villages, there is significant reduction in celebration of traditional festivals. Now a days, people like to enjoy the western culture and tradition, such as night market, disco pub, night party, late night beach part, sunburn party etc.

**12. CONCLUSION**

The data for the study was collected by referring various journals, newspapers and websites.

It can be suggested that the strict actions may be implemented at the immigration counter to eliminate the illegal supply of drugs which further causes to increase the crime rate in Goa.

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**IMPLEMENTATION OF SARVA SHIKSHA ABHIYAAN INCLUSIVE EDUCATION**

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**Jaya Yadav and Dr. Mitima Sachdeva**

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Education is a fundamental human right, essential for the empowerment and development of an individual and the society as a whole. The Indian government proposed the Right of Free and Compulsory Education (RTE) Act, making education a fundamental right of every child in the age group of 6 to 14. The Right of children to Free and Compulsory Education Act finally came into force on 1 April 2010. It is now a legally enforceable duty of the center and the state to provide free and compulsory education to all children from 6 to 14 years of age.

The key objectives of RTE is Universalization of Elementary Education (UEE). Three important aspects of UEE are access, enrolment and retention of all children in 6-14 years of age. This goal of UEE, has further been facilitated by the Constitutional (86<sup>th</sup> Amendment) Act, making free and compulsory elementary education a Fundamental Right for all the children in the age group of 6-14 years. There is also a reference of children with disabilities who are to be given elementary education in the age range of 6-18 years of age as defined in clause (1) of section 2 of the Person with Disabilities (Equal Opportunities, Protection and Full Participation) Act, 1996 in accordance with the provisions of Chapter 5 of the said Act.

**REVIEW OF LITERATURE**

The success of any initiative cannot be achieved by any individual or by the rule of law. Every individual who is involved in the implementation has to take the initiative through to the final. As such administrators hold very important leadership capacities to instill, foster and gently shove their school into an inclusive mind set. Whereas some believe that leadership is an individual function, still other feel that leadership is a cross school activity.

Recent research has shown that special education has its own pitfalls. Special education placement for students with Sheila Christopher Ph.D, Associate Professor In Rehabilitation Science, & Dean Of Student Affairs, Holy Cross College, Trichy - 620 002, India. Premila Chandrasekar, Senior Educational Consultant, Dubai UAE disabilities has failed to demonstrate substantive advantages over regular classes despite lower teacher-pupil ratio and specialized teaching. Special Education has not proven to be academically and socially stronger than would regular class placement."

**Need and justification**

Researcher find out that this type of research was not conducted in the Lucknow city so she planned out to conduct this type of research.

**HYPOTHESIS**

- Is inclusive education being included in elementary schools in Lucknow City in Sarva Shiksha Abhiyan.
- Is inclusive education policies are followed by school teachers of elementary schools of Lucknow City under Sarva Shiksha Abhiyaan.
- Sarva Shiksha Abhiyaan ensures that the children with special needs are to be given education in the free and proper environment of school like those of their average/ normal peers.
- Is assessment / evaluation of the children with special needs a special term at the Block level will set up.

**Purpose of the study:** "IMPLEMENTATION OF SARVA SHIKSHA ABHIYAAN IN INCLUSIVE EDUCATION".

**METHODOLOGY****Sample Size**

Random sample, 20 elementary schools of Lucknow City. Ten teachers and B.S.A. Observation.

**Tool**

Interview was conducted by researcher for Teachers and B.S.A.

**Result**

After interview of B.S.A and the teacher, the researcher find out that many of the government elementary school above facility was not provided to the students for example— there are no audiovisual aid for deaf student, Braille, appointment of special educator was not done since lots of seats are vacant.

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**A STUDY ON CONSUMER BEHAVIOUR TOWARDS ORGANIC FOOD PRODUCTS  
(WITH SPECIAL REFERENCE TO COIMBATORE CITY)****Vidhyavarsini R. K<sup>1</sup> and Dr. M. Nirmala<sup>2</sup>**Research Scholar & Supervisor<sup>1</sup>, Professor & Head<sup>2</sup>, Hindusthan College of Arts and Science

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**ABSTRACT**

*The adoption of organic production and processing is highly determined by market demand. Therefore this is reflected in consumer's awareness and satisfaction towards organic food products. This research result indicated that the main reason for purchasing organic food products is an expectation of a healthier and environment friendly means of production. Organic buyer tend to be older and higher educated than who do not buy them. Development of efficient marketing system is the need of the hour for strengthening the organic production in India. This paper made a humble attempt to understanding the factors influencing to purchase and the level of satisfaction towards organic food products and marketing in Coimbatore city.*

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**INTRODUCTION**

The word "organic" refers to the way farmers grow and process all agricultural products like fruits, vegetables, grains, dairy products and meat. Organic farming encourages soil and water conservation and helps in reducing pollution. Organic foods are grown without the use of synthetic pesticides, insecticides and herbicides and no genetically modified products are used. Many people prefer to grow organic food in their own gardens, because organic foods are about 20 per cent more expensive than conventional food. The Government of India has implemented the National Programme for Organic Production (NPOP). The national programme involves the accreditation programme for Certification Bodies, standards for organic production, promotion of organic farming etc. India produced around 1.70 million (2017-18) of certified organic products which includes all varieties of food products namely Oil Seeds, Cereals & Millets, Pulses, Dry Fruits, Vegetables, etc.

**OBJECTIVES**

- To analyze the factors influencing consumer behaviour towards organic food products.
- To analyze consumer satisfaction towards organic food products.

**REVIEW OF LITERATURE**

**Anupam Singh, Priyanka Verma (2017)** has studied about the factors influencing Indian consumer's actual buying behaviour towards organic food products. The purpose of this study is to examine the factors influencing the consumer's actual buying behaviour towards organic foods. For this purpose, a survey data were collected from 611 Indian consumers through a structured questionnaire. The data were analyzed using various techniques like factor analysis, independent t-test, ANOVA, multiple linear regression, and hierarchical multiple regression analysis. Results have confirmed four factors (health consciousness, knowledge, subjective norms, and price) that influence the consumer attitude towards organic food products. However, purchase intention towards organic foods is affected by these four factors along with one additional factor (i.e., availability).

**K. Ratheesh Kumar (2017)** conducted "A Study on consumer satisfaction towards organic food products with special reference to Coimbatore city". The primary data had collected from selected consumers on Simple Random sampling techniques. This study was analyzed with various tools like Chi-square Analysis and Average ranking analysis. The results concluded that most of the consumer especially in urban people prefer organic food product. Marketing of organic product is so poor in study area so the demand for organic product increases but supply is very low. The major reasons are organic producer are low, adequate market facility is not there, few number of shops, lack of awareness, and so on.

**SCOPE**

Organic food promotes a balance of human, other living organisms and the nature. It also promotes no artificial preservatives and best maintain the originality of food. This prevents excess use harmful ingredients and thereby ensures health. This study attempted to gain knowledge about consumer's awareness and satisfaction towards organic food product consumption and to see whether there is any potential this might have for changing their behavior. Any behavior can be changed, it is necessary to evaluate the current state of consumer's awareness and knowledge. Therefore consumer's attitude, factors influencing consumer behaviour towards organic food products and consumer's satisfaction will be the main agenda of this study.

**Statement of the problem:** This study is conducted to know the problem faced by the using non organic products which has chemical fertilizers input to get more yield of the products today the world requires new discussion and innovation which are leads to the potential buyers usage of harmful to the consumers have got awareness on organic products started buying and utilizing for their regular consumption the researcher shows interest on the positive impact to the society thus this particular study has been carried out.

**Limitation of the study:**

- 1) The availability of the information and data are limited by time factor.
- 2) Sample size is limited to only 25 and the results are not applicable to the whole population.

**ANALYSIS AND INTERPRETATION**

**1. Percentage Analysis**

**AWARENESS OF ORGANIC FOOD PRODUCTS**

AWARENESS	FREQUENCY	PERCENT
Yes	25	100
No	0	0
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Primary data

The above table reveals that all the respondents aware about organic food products and they are consuming same, in the opinion that using of organic products, maintenance of good health.

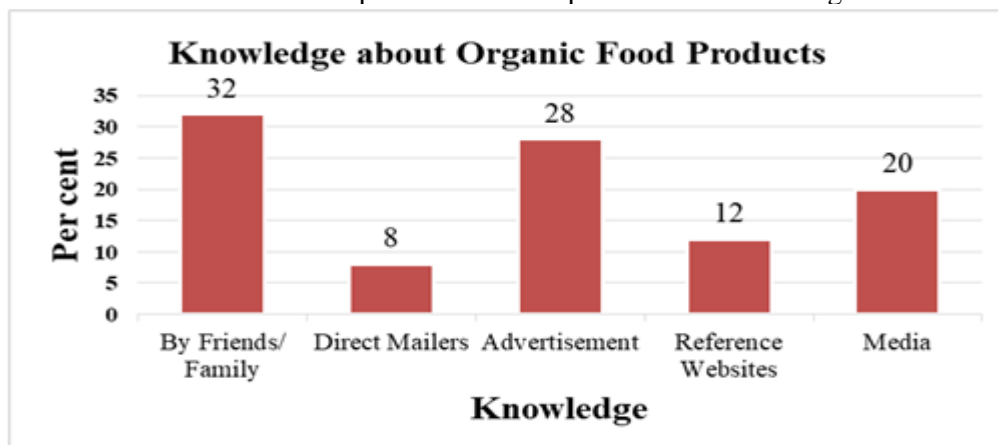


**KNOWLEDGE ABOUT ORGANIC FOOD PRODUCT**

KNOWLEDGE	FREQUENCY	PERCENT
By Friends/ Family	8	32
Direct Mailers	2	8
Advertisement	7	28
Reference Websites	3	12
Media	5	20
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Primary data

It is interfered from the above table that 32 per cent of the respondents has knowledge from friends/ family.

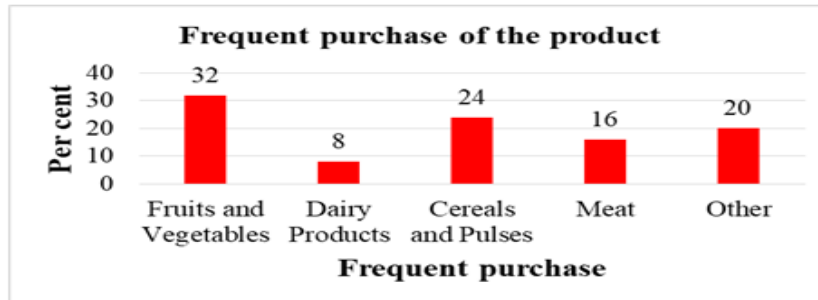


**FREQUENT PURCHASE OF THE RESPONDENTS**

FREQUENT PURCHASE	FREQUENCY	PERCENT
Fruits and Vegetables	8	32
Dairy Products	2	8
Cereals and Pulses	6	24
Meat	4	16
Other	5	20
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Primary data

From the above table describes that 32 per cent of the respondents that frequently purchase on fruits and vegetables.



**CORRELATION CO-EFFICIENT**

**FACTORS INFLUENCING TO PURCHASE AND THE LEVEL OF SATISFACTION TOWARDS ORGANIC FOOD PRODUCTS:**

Descriptive Statistics			
	Mean	Std. Deviation	N
<b>AVGFAC</b>	1.6000	.70711	<b>25</b>
<b>AVGSATIS</b>	1.4800	.58595	<b>25</b>

Correlations				
			AVGFAC	AVGSATIS
<b>Kendall's tau_b</b>	<b>AVGFAC</b>	<b>Correlation Coefficient</b>	1.000	.704**
		<b>Sig. (2-tailed)</b>	.	.000
		<b>N</b>	<b>25</b>	<b>25</b>
	<b>AVGSATIS</b>	<b>Correlation Coefficient</b>	.704**	1.000
		<b>Sig. (2-tailed)</b>	.000	.
		<b>N</b>	<b>25</b>	<b>25</b>
<b>Spearman's rho</b>	<b>AVGFAC</b>	<b>Correlation Coefficient</b>	1.000	.755**
		<b>Sig. (2-tailed)</b>	.	.000
		<b>N</b>	<b>25</b>	<b>25</b>
	<b>AVGSATIS</b>	<b>Correlation Coefficient</b>	.755**	1.000
		<b>Sig. (2-tailed)</b>	.000	.
		<b>N</b>	<b>25</b>	<b>25</b>

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

Correlations			
		AVGFAC	AVGSATIS
<b>AVGFAC</b>	<b>Pearson Correlation</b>	1	.684**
	<b>Sig. (2-tailed)</b>		.000
	<b>N</b>	25	25
<b>AVGSATIS</b>	<b>Pearson Correlation</b>	.684**	1
	<b>Sig. (2-tailed)</b>	.000	
	<b>N</b>	25	25

\*\* . Correlation is significant at the 0.01 level.

The correlation table shows that there is moderate correlation between these two factors. The highest correlation is .684 between factors influencing to purchase and level of satisfaction towards organic food products. The lowest correlation is .000 between factors influencing to purchase and level of satisfaction towards organic food products. All these two factors are positive correlated and are significant at 1 percent level.

**Hence, it is positive correlation.**

### **FINDINGS**

The following are the important findings of "A study on consumer behaviour towards organic food products.

- One hundred per cent of the respondents are aware about organic food products.
- Thirty two per cent of the respondents are knowledged by friends/ family.
- Thirty two per cent of the respondents are frequently purchasing fruits and vegetables.
- There is a positive correlation relationship between factors influencing to purchase and the level of satisfaction towards organic food products.

### **SUGGESTIONS**

1. To persuade to buy organic food products, the variables like familiarity, personal ideology, social interaction, monitory cost and habits had greater influence in buying organic food products.
2. Awareness and training program to farmer: Because more number of farmers is not growing without use of chemicals. Because farmer are go only production of high yield commercial crops so he will use more chemical fertilizer and pesticides. But some majority of farmer success in organic farming.
3. The increase frequency of viewing the advertisement of organic food products and better taste would influence the purchase organic food products. The influence of advertisement of organic food products with an increase in education found particularly among consumers.
4. Positioning organic food products by influencing consumer beliefs about the benefits they derive on consuming.
5. Demand creation large-scale production and availability of organic food products should go hand in hand. According a more responsible advertisement can play a positive and beneficial role in bringing out a desirable among homemakers in Organic food products market.

### **CONCLUSION**

Consumer behaviour plays a major role in organic food products. The marketers of organic foods need to be innovative and dynamic in order to complete with the changing purchase behaviour in the organic food product markets. The importance of organic food products was ignored for quite a long period. As results of environmental sustainability, importance is shifted towards Organic food products rather than conventional farming. The study brought out the fact that the people were well aware about the products image and availability, but not loyal entirely to organic food products.

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**INVESTIGATION AND ANALYSIS OF PROBLEMS IN LEARNING FACED BY THE STUDENTS OF VERNACULAR MEDIUM AT UG LEVEL (ENGLISH MEDIUM) IN MUMBAI REGION.****Snehaprabha Katti**Assistant Professor, Vidyalkar School of Information Technology, Wadala

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**ABSTRACT**

*Education is an important tool in the context of economic and social development of a country .It is rested on the higher education. India being developing country , it is necessary to provide sound education to the youths for the development of a country. It is observed that from the independence and subsequently every five year plan has emphasized on various policies to improve education and enrollment in higher and technical studies. Yet there have been many constraints for higher education. The present study focuses on the problems in learning by the vernacular medium students at UG level and the workable solutions apt for Indian classrooms.*

*Keywords: higher education, vernacular , ICT , Teacher fronted fear, err phobia , spoken tutorial, language laboratory.*

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**INTRODUCTION**

India is a developing country. Over years the country has achieved a marked success in all spheres of life. Yet it has not been successful to bridge the gap between the rich and the poor owing to its over-population. The rich are becoming rich and the poor are becoming poor. We can bring about a considerable equality by providing good education to the students belonging to lower strata. But the students belonging to lower strata take their education in vernacular medium. These students turn away from higher education as they cannot cope up with their higher studies owing to its medium of instruction which is English. The present research focuses on the problems in learning faced by the students belonging to vernacular medium at U.G level and to provide solution.

**OBJECTIVES**

- To find out the causes of lack of motivation in Learning English .
- To find out practical, and workable schemes of teaching effectively in overcrowded classes in Indian context.
- To identify the problems faced by the teachers.
- To find out interesting methods to improve English language through listening, reading, speaking and writing to suit the academic level fluently.

**REVIEW OF RESEARCH AND DEVELOPMENT IN THE FIELD****International status-**

The problem under consideration is faced by many countries like China , Russia . Studies show that students belonging to China and Russia who are studying in American universities take more time to accommodate with American academic culture before starting studies. Chinese students lose their confidence easily because the Chinese and the English language have totally different background and logic . The trouble is hard to communicate with others, which makes students become more silent and reticent.. It is because in China, English is taught by Grammar –Translation Method. Therefore Chinese students face problems in speaking and writing.

Similarly , Russian students who are taking higher education at AMERICAN Universities, find it difficult to cope up with the studies. This difficulty can be attributed to the difference in grammatical systems in these two languages, and also owing to their cultural differences.

**National status**

Research in this area has been carried out all over the India. All the researchers have similar opinion that students belonging to vernacular medium face problems in learning at UG level. This learning difficulty has been attributed to the transition from vernacular medium to English medium, lack of motivation and exposure to English, Teaching methodology and overcrowded classrooms. Similarly students do not voice their difficulties because of peer pressure. Even the school infrastructure is not supportive for better learning.

**Significance**

Students who find it difficult to cope up with higher studies get frustrated as they cannot make their living and ultimately turn to anti-social activities. Thus encouraging students to take higher studies will help solve their

problems and become good citizens . They will be able to provide human resource to the world and increase economy of the country.

**Methodology**

The present research uses primary and secondary data . The primary data is collected from students from under graduates of arts/science and commerce streams. The sample size of students data is 120 . The teachers data is also collected . The sample size of teachers data is 40 from across Mumbai

The primary data has been collected from various colleges in the vicinity of Wadala-Dadar, Chembur, Wadala etc. The students and teachers were interviewed from the colleges where data is collected. Some of the parents were interviewed

**FINDINGS FROM THE ANALYSIS ( STUDENTS DATA)**

1. Students belonging to Vernacular medium students face difficulties at college level as the medium of instruction is English.
2. Students who belong to vernacular medium but get enough exposure to English language at home/ surroundings/friends /self help are not much affected by this shift .
3. Students who are not exposed to English language in the class/ Surroundings/ at home/ mass media/ lack of reading English news/ books find this difference and it also seen through their performance at HSC which is seen drastically decreased compared to SSC.
4. Students are scared of asking their difficulties in the class because of peer pressure and shyness and also face teacher fronted amnesia.
5. It is seen that though ICT is used for teaching/learning, various other programs are implemented such as Remedial Coaching/ Extra Lectures , there has been no much change in the performance of the students.
6. It is found that students tend to attend lectures regularly if the teacher is good and the subject is interesting and also if they are interested in the subject .
7. Though majority of students attend lectures regularly all cannot perform well and it directly implies that it is a limitation of language of instruction.
8. It is found that majority of students do not visit regularly nor know much about it .
9. Thus I conclude that students get distracted from taking up higher education because of medium of instruction ( English ) at college level, which in-turn affects their studies and is one of the biggest constraints for taking up higher education.

**FINDINGS FROM THE ANALYSIS ( TEACHERS DATA )**

1. All the faculty members are trained
2. They use ICT in teaching/learning ( majority of them use Power point Presentation ) and few of them use spoken tutorials/ Language laboratories.
3. Teachers use various measures to improve English such as Debate competition, Elocution competition/ Motivational talks/ /Flipped class room to improve presentations, encourage them to ask difficulties and also counseling .
4. Teachers find it difficult to cope up with the students from vernacular medium as well as students from English medium students effectively as they need to be taught at a different pace.
5. They upgrade themselves through Workshops/Seminars/ Conference etc. It is seen that the college sends the faculty members for their professional up-gradation.
6. Colleges organize soft skills for the teachers as well as students to improve English.
7. The library authorities conduct various interesting measures to increase foot falls of the students in the Library such as : Award for “Best Library User”, Book Review Competition, Book Exhibition etc
8. Teachers have responded that the main cause for vernacular medium students to ask difficulties is Err phobia, Peer pressure, Lack of Confidence as well as will power and Teacher fronted Amnesia (Fear )

**CONCLUSION**

On the basis of the above findings following conclusions have been recorded :

It is concluded that though students attend lectures regularly and avail many measures provided by the college, cannot perform better compared to the efforts by the college.

The College authorities take utmost care to improve English of the students through various methods but yet have not been able to achieve the desired success to improve the Interpersonal skills of the students belonging to vernacular medium. This in turn affects their performance. The use of ICT is effective only to a limited number of students. Thus there is a dire need to take some practical and workable measures to improve English of the students from vernacular medium to cope up with the studies and encourage them to take higher education.

1. The college authorities in co-ordination with teachers should implement some programs that would keep students sufficiently exposed at the college campus.

### **RECOMMENDATIONS**

1. Teachers should identify students who are weak in English and Students who would excel in English.
2. All the weak students should be provided a buddy/ mentors in the class to communicate in English (constant exposure). This constant exposure will erase students' phobia and make learning easier irrespective of their surroundings.
3. Reading Clubs must encourage students who need enhancement in Language Learning (This must be done by the students and should be monitored by the teachers). The students must be made to read simple and interesting books to understand English as well as discussions on daily interesting topics.
4. Student who would mentor must be conferred with special awards. This would motivate students with good performance. It is also recommended that students who are being trained should be done in a friendly way and in the process learn English which would boost confidence.
5. Formation of students' group must be based on the students' social contacts with their peer groups. This practice will definitely bring peer group learning.
6. Teachers need to be more encouraging resisting through students' criticism.
7. Colleges should provide training students with their pronunciation with the help of language laboratories and spoken tutorials.

NOTE : These recommendations are to be implemented in addition to the existing measures by the college authorities.

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AN OVERVIEW OF UNNAT BHARAT ABHIYAN 2.0

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**ABSTRACT**

*The content of this research speaks about the chief programme of the ministry of Human Resource development 'Unnat Bharat Abhiyan'. This programme is influenced by the perception of transformational change in rural development which will be attained by allowing higher educational establishments to function with the people of rural India in recognizing developmental challenges and to develop suitable solutions to speed up the sustainable growth.*

*The researcher has tried to find out the reason for implementing this programme and also to explain the eligibility criteria of institutes who are willing to participate in this programme, the amount that will be disbursed to the institutes under this programme and finally the terms and conditions to be catered by the institutes who are willing to participate in this programme.*

*Keywords: Unnat Bharat Abhiyan, Human Resource development, All India Council for Technical Education (AICTE), Educational institutes.*

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**OBJECTIVE OF THE STUDY**

- + To know the root cause of Unnat Bharat Abhiyan.
- + To understand who can be the participants of Unnat Bharat Abhiyan.
- + To develop an understanding on the terms and conditions of UBA for being a part of it.

**RESEARCH METHODOLOGY**

This is a secondary research wherein the information's are collected from the official website of Unnat Bharat Abhiyan and Ministry of Human Resource Development.

**INTRODUCTION**

Unnat Bharat Abhiyan is a chief programme of the ministry of Human Resource development, with an aim to upgrade rural India. It is influenced by the perception of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India.

The Mission of Unnat Bharat Abhiyan is to allow higher educational establishments to function with the people of rural India in recognizing developmental challenges and to develop suitable solutions to speed up the sustainable growth. It is a remarkable initiative where all Higher Learning Institutes have been involved for participation in development tasks, especially in rural areas. It also focus to create a virtuous cycle between society and an comprehensive academic system by giving knowledge and practices for emerging professions and to improve the capabilities of both the private and the public sectors in responding to the development requirements of rural India.

**REVIEW OF LITERATURE**

**Ministry of Human Resource Development (2017)**, given the number of establishments participating under this scheme. Currently 748 establishments are participating under the scheme. 605 institutions are selected in the phase -2 of the scheme. Out of these 292 are Non-Technical Institutions and 313 are Technical Institutions. Also, the number of establishments which took part in phase-1 are 143.

**Project Report on UBA and Proposed Fund Flow Mechanism (2016)**, states the detailed objectives, vision and mission of UBA, different methodology of intervention and monitoring, the Expected outcomes from UBA, its fund flow mechanism & sources and also the major activities done till 2017 i.e. during the 1<sup>st</sup> Phase.

**REASON BEHIND IMPLEMENTATION OF UNNAT BHARAT ABHIYAN**

It is necessary to promote rural area development in tune with Gandhian vision of 'village republics' self-sufficient, based on using decentralized and local resources, eco-friendly technologies so that the basic needs of food, clothing, shelter, sanitation, livelihood, health care, energy, education and transportation are locally met. This is the vision of the comprehensive development of villages.

Even now, 70% of India's population lives in rural area who are engaged in agrarian economy with agriculture and associated sector employing. We can observe an immense developmental detach between the urban and

rural sectors such as imbalance in well-being, education, earnings and basic facilities as well as employment opportunities - all leading to great dissatisfaction and large-scale migration to urban areas.

A group of dedicated faculty members of Indian Institute of Technology (IIT) Delhi took the initiative to start with the conceptualization of Unnat Bharat Abhiyan as they were working for long around rural development and appropriate technology. The concept was encouraged through consultation with the representatives of a Rural Technology Action Group coordinators, number of technical institutions, voluntary organizations and government agencies who were actively involved in rural development work at the time of a National workshop which was held at IIT Delhi in September, 2014.

### **OBJECTIVE OF THE SCHEME**

- ✚ To engross the faculty and students of Higher Educational Establishments in interpreting the rural realities;
- ✚ To discover and determine existing innovative technologies, allow customization of technologies, or frame implementation methods for innovative solutions, as required by people; and
- ✚ To enable Higher Educational Establishments to contribute to devising systems for effortless implementation of various Government Programs.

### **ELIGIBLE INSTITUTES**

- ✚ The Apex Institution must be an All India Council for Technical Education (AICTE) approved Institute or University Department.
- ✚ The Apex Institution must be Government Aided institute or Government.
- ✚ Only one proposal will be accepted from each institute for funding for this scheme.
- ✚ The applicant Apex Institute must have recognized a program to attain a specific set of goals as per the guidelines of Unnat Bharat Abhiyan of Government of India.

### **DURATION OF THE PROJECT**

- ✚ Duration of project shall be of 2 years.

### **LIMIT OF FUNDING**

- ✚ The limit of funding is Rs. 5 lakh

### **DISBURSEMENT OF THE FUNDS**

90% of the grant will be released at the start of the project and remaining 10% will be released on submission of receipt of Utilization certificate, Statement of Expenditure, Completion/Progress report and attested photocopies of supporting vouchers.

### **PROCESSING METHODOLOGY**

The proposal shall be determined by an Experts Committee comprising of three member expert committee not below the rank of Associate Professor.

### **TERMS AND CONDITIONS**

- (a) The applicant Apex Institute must have determined a program to attain specific goals as per the guidelines of Unnat Bharat Abhiyan of Government of India.
- (b) The Chief organizer shall be a full time academician of the Apex institute.
- (c) The Chief organizer shall be mainly responsible for the execution of the project.

The Apex Institution shall dedicate itself to rural development and technologies, several other plans, programs or projects of the institute shall also engross with rural affairs. This can provide the academic institutional resource support for executing Unnat Bharat Abhiyan.

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## HIGHER EDUCATION IN INDIA AND QUALITY PARAMETERS OF NEW NAAC ASSESSMENT PROCESS

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### ABSTRACT

*An excellent and equitable system of higher education would promote access, and would positively impact the marginalized communities, would result in better employment opportunity for people from different socio economic background in the emerging knowledge economy. There are a host of challenges facing the higher education system in India. The paper makes an attempt to discuss some of the challenges faced by privatization of the higher education and the central issue of regulating quality of these private higher education institutions which would enhance human capital growth and economic and social development of the country. Education is a great leveller, and provides the only sustainable route to reduce disparities. There is a direct correlation to the significance and importance of higher education in the knowledge economy as it would contribute to a highly skilled workforce. About 65% of India's population today is less than 35 years old. A huge demographic dividend will be available, if India revamps the education sector. Not doing so will have serious consequences for the country. If India focuses on quality of higher education it can reap the demographic dividend or else lead to a demographic disaster.*

*Keywords: Higher Education in India, Privatization, Equity, Access, Quality, Impact*

### 1. INTRODUCTION

By 2030, India will be amongst the youngest nations in the world. With nearly 140 million people in the college-going age group, one in every four graduates in the world will be a product of the Indian higher education system. By 2030, the already existing challenges for Indian higher education – access, equity and quality – will only be worsen unless we significantly transform our higher education model.

One of the foundations of knowledge economy is higher education and skill based training. Further Higher education institutions are important for creation, dissemination and transfer of knowledge and its application to industry.

In India, The University Grants Commission (UGC) which enforces its standards is the main governing body regulating the higher education institutions and advises the government, coordinating between the centre and the state. Accreditation for higher learning is monitored by twelve autonomous bodies established by the UGC. Governance of Higher Education in India is quite complex with Central and State Government along with Private and Deemed Universities taking responsibility.

### 2. OBJECTIVES OF THE STUDY

The objectives of the present study were as follows

1. To analyze the complex system of Higher Education in India with respect to Equity, Access, and Quality.
2. To study the impact of Higher Education on marginalized communities, women and on scheduled castes and scheduled tribes.
3. To examine the quality standards of Higher Education in India and role played by NAAC.

### 3. LITERATURE REVIEW

Fundamental challenges of access, equity and quality



Figure-1: Three Fundamental Challenges of Higher Education in India Source Shankapal, 2015

### **3.1 Meaning of Higher Education in India**

Higher education, post-secondary education, or third level education is an optional final stage of formal learning that occurs after secondary education. Often delivered at universities, academies, colleges, seminars, and institutes of technology, higher education is also available through certain college-level institutes, including vocational schools, trade schools, and other colleges that award academic degrees or professional certificates. Higher education system in India is the third largest in the world. The main governing body at the tertiary level is the University Grant Commission, which enforces its standards, advises the government, and helps coordinate between the centre and the state.

Indian education system comprises of 10 years of primary education, 2 years of secondary education, 3 years of 'bachelor degree, 2 years of master degree and at least 3 years beyond master degree for a Ph.D. According to National Education Policy -2016, this is known as 10+2+3 system. The Post Higher Secondary Education is known as Higher Education in India. Higher education includes teaching, research, demanding application based learning, social services activities of colleges and universities.

There has been an upsurge in the demand for higher education after independence, resulting in a virtual explosion in the number of universities and colleges in the country. Many students join university courses merely to obtain a degree, which was considered a passport to white collared jobs. However, the utility of higher education in assuring employment is questionable. Many graduate and post graduate students do not get jobs in their respective fields even after spending several years in acquiring higher education. While the problem of educated unemployed youth remains acute, there is also, paradoxically, a shortage of skilled manpower in the labour market. There a clear gap between the quality of education in academia and the demands of the corporate world.

### **3.2 Equity**

Equity is fair access to livelihood, education, participation in social, cultural, political affairs of the community/society. There are four kinds of disparity in higher education are visible in India: gender disparity, geographical disparity, minority-majority based disparity, and disparity based on economic class. The above mentioned disparities in access to privatization of higher education. ( Alam and Halder, 2016). Uneven growth and access to opportunity: Socially, India remains highly divided; access to higher education is uneven with multidimensional inequalities in enrolment across population groups and geographies.( Kaushik D,2017).

### **3.3 Access**

India's higher education system stands third in size in the world after the US and China with nearly 26 million students in over 45,000 institutions in the country ( Shaikh Y,2017). In the last decade the country has witnessed a particularly high growth rate in student enrolment at a CAGR of 10.8% and institutions at 9% ( Shaguri O, 2017).

As of 20.12.2018, there were 892 Universities in India, of which 394 are State Universities, 125 are Deemed Universities, 48 are Central Universities and 325 are private Universities. (AISHE Report, 2018). The involvement of private sector in higher education has seen radical changes in the field. Today over 60% of higher education institutions in India are promoted by the private sector. India has the largest number of Higher Education institutions in the world, with student enrolments at the second highest (AISHE Report, 2018).

Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education. Enrolment in higher education touched 25.8% in 2018, marginally up from last year's 25.2%, but the share of girl students remains lowest in institutions of national importance, according the annual survey conducted by the ministry of human resource development (AISHE Report, 2018).

Further, above 85 percent of students are enrolled at undergraduate level and only 15 percent are enrolment at post graduate level. Surprisingly, diploma and certificate education has a meagre 1 per cent enrolment as it is considered as an available provision for those who are not able to make it in the mainstream higher education.

When we consider the impact of higher education on women and marginalized communities, we note that, even though there is a remarkable progress in girl's education in secondary level due to Government programmes and motivation, it is lower at higher education level as can be seen from the below mentioned table.



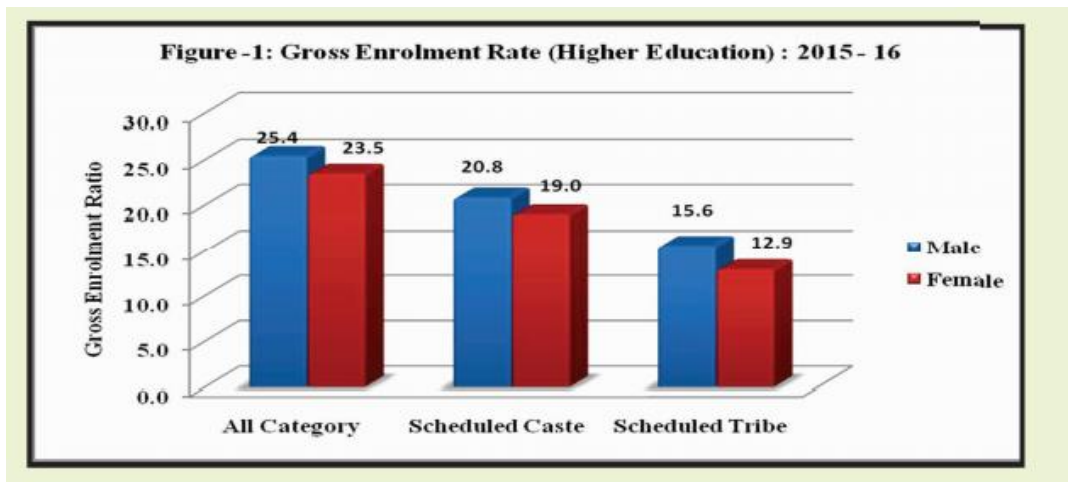


Table-I: Gross Enrolment in Higher Education 2015-2016  
 Source: Education Statistics at a Glance ( MHRD, 2018).

Nearly one third of Indian population constitutes SC and ST. Almost all belong to poor family, and in remote area so they are unable to participate in development program. They are still lying below poverty level. As compared to SC , ST are far behind in education as well as social activities and development. The reason may have several problems and they should be identified and it is differ in both the caste. Further when we consider the gross enrolment we can notice that for ST and SC students, the GER is lower. Some of the reasons cited for this lower GER are income, followed by illiteracy and low level of parental education, large household and earning and learning are some of the factors responsible for this.

Table 13: Gross Enrolment Rate (GER): 2015-16

Level	ALL			SC			ST		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary (I-V)	97.9	100.7	99.2	109.5	112.4	110.9	107.8	105.7	106.7
Upper Primary (VI-VIII)	88.7	97.6	92.8	97.8	107.7	102.4	95.4	98.2	96.7
Elementary (I-VIII)	94.5	99.6	96.9	105.3	110.8	107.9	103.4	103.1	103.3
Secondary (IX-X)	79.2	81.0	80.0	83.9	86.9	85.3	73.7	75.4	74.5
Senior Secondary (XI-XII)	56.0	56.4	56.2	55.8	58.0	56.8	43.8	42.4	43.1
Higher Education	25.4	23.5	24.5	20.8	19.0	19.9	15.6	12.9	14.2

Data Source:

For School Education: National Institute of Educational Planning & Administration, New Delhi  
 Figures related to School Education are provisional.

For Higher Education: Department of Higher Education, MHRD, Government of India

Table-II: Gross Enrolment from Primary to Higher Education 2015-2016  
 Source: Education Statistics at a Glance ( MHRD, 2018).

Similarly, Gender Parity Index based on Gross Enrolment Rate (GPI- based on GER), is the ratio of Gross Enrolment Rate of female students enrolled at Primary, Secondary and Tertiary levels of education to the corresponding ratio of male students at that level. Thus GPI-based on GER is free from the effects of the population structure of the appropriate age group which provides picture of gender equality in education.

Table-15: Gender Parity Index based on GER (GPI): 2015-16

Level	All	SC	ST
Primary (I-V)	1.03	1.03	0.98
Upper Primary (VI-VIII)	1.10	1.10	1.03
Elementary (I-VIII)	1.05	1.05	1.00
Secondary (IX-X)	1.02	1.04	1.02
Senior Secondary (XI-XII)	1.01	1.04	0.97
Higher Education	0.92	0.91	0.83

Table-III: Parity Index based on Gross Enrolment in Higher Education 2015-2016  
 Source: Education Statistics at a Glance (MHRD, 2018).

The Gender Parity Index shows an improvement in the GPI from 0.86 in 2011-12 to 0.92 in 2015-16. Women's participation in certain disciplines of higher education like Bachelor of Computer Application, Business Administration and M.Tech.

### 3.4 Quality in Higher Education

The overall scenario of higher education in India does not match with the global Quality standards. Hence, there is enough justification for an increased assessment of the Quality of the country's educational institutions. Traditionally, these institutions assumed that Quality could be determined by their internal resources, viz., faculty with an impressive set of degrees and experience detailed at the end of the institute's admission brochure, number of books and journals in the library, an ultra-modern campus, and size of the endowment, etc., or by its definable and assessable outputs, viz., efficient use of resources, producing uniquely educated, highly satisfied and employable graduates,

There are various parameters using which one can attempt to judge the quality of higher education traditionally considered infrastructure, teacher student ratio, faculty's use of ICT. However, recently, innovative teaching learning pedagogy, its research capabilities and patents filed; placements of its students, its global ranking etc are some of the new elements of quality applied to the higher education institutes.

There are three main agencies to evaluate quality of institutions; The National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA) for technical education, and the Accreditation Board (AB) for agriculture institutions. It shows that majority of accreditation process is carried out by NAAC. But as accreditation is voluntary, except for in some states, only 341 universities and 7695 Institutions have been accredited by NAAC, which is about 40%. As can be seen from the below mentioned graph, 60% of the Universities have a A grade, while 67% of the Institutes of Higher Education have a B grade. Further, unlike many other countries accreditation is largely of the institute not of a particular program per se.

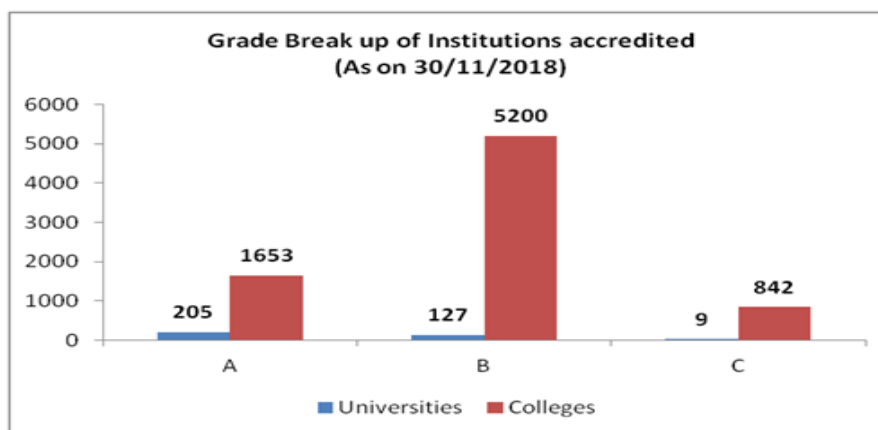


Table-IV: Grades allotted to NAAC Accredited Institutions of Higher Education  
Source: NAAC Statistics as on 30/11/2018

Academic scholarship and research is a form of intangible asset of a faculty, university and country. High impact research metrics is an important parameter for research is a form of intangible asset (e.g. patents, research papers, books) that is owned by a faculty, university, and country. Between the period 1996-2013, India had 8, 25,025 citable documents; 666,045 citations and 8.83 citations per document. Whereas that for China during the same term is 3,095,159 citable document, 14,752,062 citations 6.81 citations per document respectively. (Reddy K, et al; 2014). Further according the same authors, the H index which is an author-level metric that attempts to measure both the productivity and citation impact of the publications of a scientist or scholar. The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications, Indian authors have a 341 lower than that of China which is at 436.

In recent years, admissions and placements is becoming complex due to government policies, governance of higher education institution. Further, government and private universities are not able to focus on global university rankings due to financial assistance, research infrastructure, research skills, and teaching emphasis (Sheel and Vohra,2014).

The global ranking of universities is a useful indicator of their institutional performance, based on a relative assessment in the areas of research and teaching, reputation of faculty members, reputation among employers, resource availability, share of international students and activities and other factors. Indian universities do not find a place in the top 200 positions in the global ranking of universities.

India has increased its representation in the Times Higher Education (THE) World University Rankings with 49 places compared to last year's 42 -- but a spot in the top 250 continues to elude Indian institutes. The Indian Institute of Science -- in the 251-300 band -- continues to retain the lead, but in an impressive debut, IIT Indore becomes India's second highest-ranked university in the 351-400 rankings bracket. (Economic Times, Sept, 2018). Not only has IIT Indore managed to make its place among the global top 400 institutions with its strongest scoring for research volume and research impact, it has, overtaken IIT Bombay, which slips from the 351-400 to 401-500 banding. Though India has increased its representation in the World University ranking, the majority of its institutions are substandard. (Economic Times, Sept, 2018).

There is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education. The National Assessment and Accreditation Council (NAAC) has been set up to facilitate and assess their performance vis-a-vis set parameters. NAAC has identified a set of seven criteria to serve as the basis of its assessment procedures. NAAC has categorized the Higher Educational Institutions into three major types (University, Autonomous College, and Affiliated/Constituent College) and assigned different weightages to these criteria under different key aspects based on the functioning and organizational focus of the three types of HEIs.

Since July, 2017 a 30% of system generated scores The revised process is being adopted. The main focus of the revision process has been to enhance the redeeming features of the accreditation process and make them more robust, objective, transparent and scalable as well as make it ICT enabled. It also has reduced duration of accreditation process.

The assessment process will be carried out in three stages. As stated earlier, it will comprise three main components, viz., Self-Study Report (SSR), Student Satisfaction Survey and the Peer Team Report. The SSR has a total of 137 Metrics for Universities covering the seven Criteria described earlier. The SSR has two kinds of Metrics: one, those requiring quantifiable facts and figures as data which have been indicated as 'quantitative metrics' (QnM); and two, those metrics requiring descriptive responses and are accordingly named 'qualitative metrics' (QIM). Table 1 depicts the distribution of Key Indicators (KIs) and Metrics across them

For understanding the quality improvement in NAAC assessment, after 2017, the study cites the ABCD (Advantages, Benefits, Constraints and Disadvantages) Model of for Analysis NAAC Accreditation process. (Aithal, S 2016). In this paper, we analytically examine the critical constituent elements and their role and decisiveness in the success of addressing the key issues of that particular criteria. Let us examine each criteria of NAAC as mentioned below :

Criteria I deal with Curricular Aspects, where the maximum marks are for Academic Flexibility (30%) and Curricular Enrichment (30%). Thus in this criteria the critical constituent element is a syllabus should reflect Changing global facets of businesses and economies, Dynamism in industry practices and evolution of technology as also incorporating emerging new business models like Digital Marketing and Retail Management as a part of Marketing Programme of MMS. Curriculum Enrichment is achieved committed towards an education that enables holistic development of students, blossoming them to be multi-faceted human beings. This entails sensitizing students towards issues related to gender equality, environment & sustainability, human values and the ethical dimensions which are implicit in every decision or action we take in our personal, professional, and social life.

Criteria II deals with Teaching- Learning and Evaluation where maximum marks are for teacher's profile and quality (14%), followed by teaching-learning (14%) and evaluation process (14%). In this criteria the critical constituent element is teachers as lifelong learners, pursuing high impact research, citations and patents are given more weightage. The critical element in teaching learning is the student centric approach, various teaching pedagogies which are incorporated in teaching learning. Finally as regards the evaluation process, the transparency and robustness in internal assessment, the institute has a well constituted Examination Committee, Unfair Means/Grievances Committee and Results Committee is a critical element of this criteria.

Criteria III Research, Innovations and Extension deals with high impact research, publications and citations, and patents filed by the Institute or the Scholar or Scientist of the Institute. In this criterion the maximum marks (50%) are for Extension Activities. The critical constituent element for criteria III, is promotion of community service by arranging various activities and programs so as to sensitize students about social issues. Students should be given project where there is social relevance. Faculty members play a vital role in the same and encourage student involvement in social activities. Various issues like environment, climate change, sensitizing them to various socio economic issues like inclusive education, education in rural areas, visit to various NGOs.

Criteria IV consists of Infrastructure and Learning Resources : Under this criteria, the maximum marks are for Physical Facilities (30%) and IT Infrastructure (30%). The critical element under this criteria is the development of physical assets and facilities in higher education is complex and cost intensive and to ensure their quality and maintain world standards is very challenging.

Criteria V deals with Student Support and Progression where the maximum marks are allotted for Student's Support (38%) and for Student's Progression (34%). The quality of higher education depends directly on the student support services provided in various modes of higher education. Student support for financial aid through scholarships, free ships and educational loans is facilitated by most of the Institutes of Higher Education. Students have various add on courses which enhance their placements. Also coaching for competitive examinations, assisting students in placement through a placement cell as also an entrepreneurial cell all contribute and are the critical aspects of Student's support and progression.

Criteria VI deals with Governance, Leadership and Management of the Institute of Higher Education, where the maximum marks are for Faculty empowerment strategies (30%) and for Internal Quality Assurance System (30%). The critical element for this criterion is a comprehensive performance appraisal system, so as to fulfil the aspirations of the faculty and motivate them for a greater commitment to teaching-learning process.

Criteria VII deals with Institutional Values and Best Practices, where the maximum marks are allotted for Institutional Values and Social Responsibilities (50%). The critical element for this criteria would be 'fostering social responsibility in higher education' which is an important pillar to sensitize the youth to their social responsibility. By improving engagements with the community, institutions of higher education can reinforce this value.

The biggest challenge for higher education is quality and the new norms of Assessment by NAAC examine this from a different perspective. As can be seen from the study of criteria mentioned above, one can conclude that Curriculum is assessed as outcome based, relevant, keeping abreast of industry requirements rather than input based, outdated and text book based. Further most of the Universities give academic flexibility through choice based syllabus and participative and experiential learning using various teaching pedagogy. As regards research, there is a need to have more industry academia collaboration for applied research and in alliance with government organisations like CSIR, DRDO, DBT etc. with shared responsibilities.

### **3.5 Conclusion**

Higher education in India is promising yet a challenging task. We can conclude that of the three aspects studied in this paper, equity, access and quality. To ensure access to higher education by weaker section of society, government has to increase public expenditure on higher education. On the whole, an improvement in the standards of education could be achieved through a balanced relationship between public and private sector. As regards the new process of assessment and accreditation of NAAC since July, 2017 is an attempt towards making higher education institutes to achieve global standards. They must also impart education which focuses on universal values, social obligation and making them responsible citizens.

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**A STUDY OF FACTORS OF SUBLIMINAL ADVERTISING AND ITS INFLUENCE ON CONSUMER BUYING BEHAVIOR****Dr. K. Prabhakar Rajkumar<sup>1</sup> and M. Priya<sup>2</sup>**Associate Professor<sup>1</sup> and Research Scholar<sup>2</sup>, Department of Commerce, Periyar University, Salem

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**ABSTRACT**

*Advertisements have become an integral part of any organization's marketing strategy. Advertisers use many tactics in order to persuade the consumers, one of which is subliminal advertising. Subliminal is about creating subconscious impact on consumer's purchasing behavior. Not many studies have been done with regard to consumer awareness of such manipulative strategy and also the way in which every individual interprets the same image in a different way depending upon their attitudes, behavior, feelings, persona and psyche in the Indian context. 20 respondents were selected randomly for this research paper. Research being exploratory in nature, qualitative research approach was adopted wherein concept of thematic analysis was applied in order to interpret the responses of individuals into the themes which best reflects their thoughts and imagination.*

*Keywords: Subliminal advertising, Subconscious, persona, attitude, psyche.*

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**INTRODUCTION**

Advertising from the Latin reclaim, "evoke" in business is a form of marketing communication, which aims to encourage, persuade, or in some cases even manipulate the audience (viewers, readers or listeners, etc.) to take or continue to take an action. Philip Kotler defined it as "any paid form of non-personal presentation and promotion of ideas, goods or services from the sponsor evident by the print media (newspapers and magazines), telecommunications (radio and television), network communications (telephone, cable, satellite, wireless), electronic media (audiotape, videotape, videodisk, CD-ROM, web page), and display media (billboards, signs, posters)"<sup>viii</sup>. It is an impersonal form of mass communication, which offers a high degree of control of those responsible for the preparation and implementation of promotional messages.

But there is a flip side to advertising as well which is outside the purview of just selling and persuading. The marketers are manipulating the consumers in buying something they do not need by triggering an unconscious need by exposing the consumers to product pictures, brand names and other marketing stimuli which is referred to as subliminal advertising. The rationale behind subliminal advertising is that once a person is unconsciously exposed to this message, the person is believed to decode the information and act upon it without being able to acknowledge a communication source. Subliminal means "below threshold". This threshold is different for different people. A subliminal message is such a short one that it goes unnoticed. Advertisers use subliminal techniques to influence the second and third level of consciousness. They target the consumer's fears and desires, manipulating them in ways never thought possible.

**LITERATURE REVIEW**

This review is conducted to explore the various sources through which a consumer gets manipulated or influenced by a concept called subliminal advertising. However as not much literature is available in the context of the same in India, reviews have been on the research done internationally in the context of studying the psychology and perception of consumers to subliminal advertising, facts and methodologies been adopted, its effect on consumer's buying intention. Some elements of literature do not give a holistic perspective, nevertheless all elements have been considered to get a 360 degree unbiased view on the subject.

**STUDIES RELATED TO KEY DRIVERS FOR THE ADVERTISERS**

Espley, Savitsky & Kachelnski(1990) identified factors that a "Skeptical Inquirer" must keep in mind about the different types of hidden messages used in an advertisement which in turn influence the sub-conscious mind of consumers which results them in reacting differently in their choices, attitudes and actions. Marketers use two kinds of tactics: 1) Subliminal Perception (Perception of stimuli and lie below the threshold of unconscious mind) 2) Subliminal Persuasion (Requires stimulus presented subliminally to have some effort to drive a consumer's behavior, judgment in a particular way)

This paper focus on the subliminal visual priming techniques where the advertisers make use of a pattern mask, namely, geometric shapes or letters to have an unsaid impact on consumer's judgments and reactions. It has been done due the mere casual determinant of behavior i.e. consumers do not really know the cause behind their actions and the fact they are very poor in articulating the facts around them as it focus their unconscious mind.

Wiklik(2000), explains advertising is neither good or bad by nature, but it's a tool that can be used well or badly. She refers to sexual, moral and religions taboos that being highlighted time and again in advertisements

in order to make it visible in the minds of the consumer. Also, she states people responsible for its content should be morally responsible for the advertising strategies which persuade the people in a certain way.

Atrass (2012), studies the effectiveness of subliminal messages on brand design. He suggested subliminal message enriches the aesthetic and functional values of the brand. It makes the brand design look more innovative and smart to attract the consumer, catch his mind and leave an internal impression. Also it could improve the effectiveness of his loyalty toward the brand and its products.

### **OBJECTIVE OF THE STUDY**

In order to bridge the gaps revealed in the various research papers, this particular study tried to target some aspects related to subliminal advertising which had some effect on the end consumers. The study tries to understand the following aspects:

- To determine consumers awareness about subliminal marketing.
- To understand the impact of subliminal advertising on consumers ability to interpret the subliminal message of advertisements
- To analyse consumers response after being exposed to hidden persuaders.

### **POST IMPACT ON CONSUMERS**

From the above interpretations of consumers, the impact of consumer decision making will differ on the basis of as to whether consumers are able to identify the hidden persuaders or not. This can be deduced from the following parameters.

### **CONSUMER'S EXPECTATIONS FROM ADVERTISEMENTS**

Irrespective of the gender of the respondent, the expectations are plenty and numerous but some reasons differentiated one ad copy from that of the other. Consumer expects the advertisement to be informational as they get a clear picture of the products features and attributes at the same time they want the advertisement to have creative and catchy content. Also, the consumers have gone rational and no celebrity would induce them to buy a product and therefore advertisers must endorse a person who genuinely believes and resonates with the product. And lastly, emotional ads are the way of getting into consumer's heart and mind as they are still very much intact with their traditional roots and therefore those ads immediately induces them to buy.

### **CONCLUSION OF THE FINDINGS**

From the above study it can be said subliminal advertising plays a very important aspect in both making the consumer attracted towards the product if done properly and very subtly and can also tarnish the brand image of the product if product being negatively projected even towards one demographic. The consumer buying behavior is not only limited to the internal attributes of the product but also the external factors relating to it mainly the type of advertisement, the advertising medium, product type, presence of celebrities etc. Also women and men are different in their approach to advertisements and hence female respondents are more sensitive to sexual advertisements whereas on the other hand men respondents were attracted to felt as it seemed desirable. Also, every individual is different in their personality and traits they exhibit and therefore it becomes quite difficult to study every individual and group them into one theme.

### **MANAGERIAL IMPLICATIONS OF THE STUDY**

The study highlights a severe need for good advertising techniques. Organizations incur heavy expenditure on advertisements and if went wrong, it can affect the entire brand image of the product. Subliminal advertising is used by the advertising agencies in print and television advertisements in order to target the subconscious mind of the consumers in order to get them attracted to the product. But like seen above in the findings, women respondent are very sensitive to phallic symbols being used in the print ads which make not only results in disliking the brand but also negative marketing of the brand which can cost a lot to the organization.

The advertising message must be made keeping in mind the demographic an organization is dealing with. Subliminal advertising is said only to be successful if the subliminal message hits the unconscious cord of human's mind which was not the case in any advertisement used above except for Palmolive and axe. Subtlety is not only important for capturing the target market but also at the same time it's important to not hurt the sentiments of the individuals.

### **CONCLUSION**

The overall conclusion of the study is every individual is different in their opinions, behavior, personality traits etc and has different interpretations for the same object given to them. Their buying behavior is also affected in the same way where not only the internal factors but the external factors drive them towards a product. The most important driver being the advertisement part where advertisers use different techniques where subliminal

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is a part of it and tries to capture the market by triggering the needs in their sub-conscious minds. It works for the organizations if the consumers are not able to get the subliminal message and is only captured in their subconscious mind and does the complete opposite if it gets captured consciously.

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## WASTE MANAGEMENT IN SHOPPING MALLS

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### ABSTRACT

*Shopping malls and other retail providers have become a staple in our culture. Millions of individuals are visiting shopping centers every year and they, the customer, are also generating streams of trash. Solid waste is an issue for all shopping malls and retail facilities across the India and globally. The rising cost in disposal rates across the globe is constantly rising too. Managing this waste is a biggest task in front of all the SOBO malls of Mumbai and its suburbs and most of them are really handling well by using creative and eco friendly ways of managing waste. This paper is intended to examine the performance of shopping malls in India with regard to waste production, disposal and waste management.*

*Keywords: Shopping malls, disposal, ecofriendly, waste management*

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### INTRODUCTION

Improper waste disposal and lack of adequate waste management system in India has been significant issue related to waste management. Recent years have seen some progress on this front through collaborative initiatives between government, industries and civil society, but much more is needed to uplift this scenario of environment protection and conservation.

Waste management is the collection, transportation, and disposal of garbage, sewage, and other waste products. It encompasses management of all processes and resources for proper handling of waste materials, from maintenance of waste transport trucks and dumping facilities to compliance with health codes and environmental regulations. The primary goal of waste management is reducing and eliminating adverse impacts of waste materials on human health and environment to support economic development and superior quality of life. Waste management is thus a biggest task in front of all the SOBO malls of India. They have to provide a maximum of resource recovery from the waste while minimizing use of resource in the waste handling. Most of them have the ideal waste management system which provides a customized and robust handling of all waste with a minimum of effort for the customer.

Malls, Shopping centers and retailers have a great opportunity when it comes to recycling and waste management. Shopping malls that execute systematic programs can recycle, reduce waste disposal and increase the reuse of waste materials while saving money in the process and protecting the environment.

Whether the shopping center is starting from scratch or looking to expand the center's recycling efforts, there are a number of critical steps to success in recycling at the commercial level.

- **Strong management support** The support of corporate management is very important because a waste management program requires a lot of investment of time, money and energy. Such programs cannot be carried out without the strong support of employees .If corporate management is fully behind the waste management program, then employees will be more likely to have the same outlook.
- **Develop a “green employee team”** Employees from all departments of the mall should be included in waste management programme. They should be given knowledge and make understand the importance of it so that they can participate in the initiative actively.
- **Conduct a waste audit** A waste audit is a formal, structured process used to quantify the amount and types of waste being generated by a retailer or business center. Before you can decide which materials to collect or add to your waste management or recycling program a waste audit should be conducted for your mall or shopping center.
- **Take into consideration state laws and regulations** shopping centers should be sure to check local district and state regulations about waste management and recycling as this varies across the country in terms or laws and requirements.
- **Consider customer and society participation** Allow society, customers, and students to be a part of your recycling programs. This gives them a chance in contributing to the environment.
- **Implement and manage your recycling program** Create systematic procedures that keep employees informed about proper recycling procedures that needs to be implemented.

- **Follow up and Evaluation** Examine your waste management programme weekly or monthly and check whether its implementation is going smoothly. Follow up to ensure that procedures are being followed and further educate employees as necessary.

**Following are the effective and creative ways used by malls in India to make effective use of resources and to manage waste efficiently.**

- **Use of Renewable energy** Malls are using wind energy for mall operations to an extent of 90 percent of total power consumption.
- **Use of solar energy** Most of the malls have installed solar power plants to conserve energy and to use it for lightening in the malls. Viviana Mall in Thane is the first mall in India to install a 900KVA solar power plant at a single site on its rooftop. Generating 91000 watt in a month through solar energy, the mall aims to generate around 33 lakh unit of electricity in the next three years using solar energy. The mall has installed solar powered street lights around the mall.
- **No Plastic** All retailers in malls use recyclable bags and paper bags with 100 percent adherence
- **Horticulture** Most of the surroundings of mall area is covered with greenery, and more plantation is being done within and outside mall for carbon reduction. Brookefields mall , Coimbatore has installed 200 KLD STP for treating sewage water and is pumping it into the cooling tower (AC purpose) after treatment. As a part of mall marketing and CSR initiatives, has initiated and founded Kovai Green League with Bosch, WWF-India and Rotary Club of Coimbatore to increase the green cover of the city by partnering with schools and colleges. Through the forum the following has been achieved: Conducted sessions for over 3000+ students on Carbon Footprint, Wealth out of Waste and formed Green Champion clubs in all schools so that they can take the green initiative forward. Conducted Greenest Campus Award for schools to encourage and recognize green campuses.
- **Organic waste management** Malls are equipped with Organic Waste Converter to generate Organic Manure out of Wet waste generated and thereby converting 100 percent wet waste to manure. This manure is also made available to the customers and nearby plant nurseries free of cost aiming towards Green Earth. The mall ensures effective garbage separation by investing in a wet waste decompose machine to convert waste to manure. OWC plants are installed in the malls' compound to generate organic composite every day. Viviana mall,Thane has its own 'Organic Waste Management' plant for treating organic waste into manure. All the food waste generated is converted to organic manure on a daily basis. Every month, around 5,500kg of manure is generated which gets distributed to customers free of cost and also used for developing greenery around the mall.
- **Rain Water Harvesting** Creating trenches to divert rain water to bore well recharging and improve the ground water source. A rain water harvesting system with near to 10 lakh liters capacity is another measure undertaken by the malls towards a greener tomorrow.
- **Usage of LED Lighting** Malls have installed CFLs / LED lights for energy conservation across all floors. Retailers are also encouraged to reduce carbon monoxide emission and consume less energy.
- **Recycling of water** Malls have a well-equipped Sewage Treatment Plant which helps us to recycle the water for daily mall operations. Equipped with "state of the art" sewage treatment plant, malls ensure recycling of 100 percent of waste water thus having Zero water discharge.

### CONCLUSION

While recycling includes items that have already become trash, waste management goes one step further in removing overall trash and disposal. Thus successful conduction and implementation of waste management program in the retail sector results in environmental protection and economic benefits. In addition to reducing the burden on landfills, waste management also helps conserve natural resources and reduces the energy and pollution associated with manufacturing.

For shopping center owners, waste management strategies can result into cost savings in a variety of areas other than waste disposal, including transport and labor. It would also result in having good status and relationship with the government, society, customers and employees. As most of the malls are do taking such initiative it shows that they are do taking good care of environment and doing their best to protect and conserve it.

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  - *"Waste to Energy and Waste Management Market in India 2018"*

## AN ANALYTICAL STUDY OF GOVERNMENT INITIATIVES TOWARDS E- GOVERNANCE CHALLENGES

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### ABSTRACT

*In today's time the development of any country depends on the uses of E-Governance and also their penetration. Development of any country can be judge by the scope of E-Governance in that country. E-Governance assumes greater importance in the context of management of today's governmental structures to achieve rapid economic growth and improved quality of life. The emergence of Information and Communication Technology (ICT) has provided means for faster and better communication, retrieval of data and utilization of information to its users. Not only has the Ministry Of Information Technology recommended a minimum amount of every state's budget towards this endeavour, it has also been actively looking for benchmarks to be made available as best practice to be emulated by all states. In developing countries like India, where literacy level is very low and even most of the people are living below poverty line, people are not even aware about the benefits of e-Governance activities and people do not use Information and Communication technologies to a much extent, there exist a number of problems to implement e-Governance activities. This research paper highlights the main challenges related to the implementation of e-Governance in India and initiatives taken by Central and state government for success of e-governance.*

*Keywords: e-Governance, ICT, literacy level, government initiatives, e-readiness, Information Technology (IT), m-governance, G2C, G2G, G2B, G2E.*

### KEY DEFINITIONS

E-Governance is defined as Government activities that take place over electronic communications among all levels of government, citizens, and the business community, including: acquiring and providing products and services; placing and receiving orders; providing and obtaining information; and completing financial transactions.

ICT is a means for providing efficient storing and retrieval of data, instantaneous transmission of information, processing information and data faster than the earlier manual systems, speeding up governmental processes, taking decisions expeditiously and judiciously, increasing transparency and enforcing accountability.

E-readiness is defined as the ability to use information and communication technologies to develop one's economy and welfare.

Literacy can be defined as the ability to read and write with understanding in any language.

Per capita income means how much each individual receives, in the terms of money, of the yearly income generated in a country.

M-Governance, is the use of mobile or wireless to improve Governance service and information "anytime, anywhere".

Gatekeepers are official who ask for bribe to process the documents/file.

### INTRODUCTION

India is one the fastest growing countries. But our population and governance makes us retain this tag of "Developing country" or "Newly Industrialized Country". For the sake of comparison I've choose the most developed and the one similar to our size for comparison.

Parameters	USA	China	India
Human Development Index	0.920	0.738	0.624
\$1.90/day- PPP (% of population)	0	1.9%	12.4%
Life Expectancy (in years)	79.3	76.1	68.3
GDP per capita	\$59,500	\$16,000	\$ 7,200
Exports in million \$	\$ 1.4 trillion	\$ 2 trillion	\$0.2 trillion
Literacy rate	N/A	96.40%	72.10%
Population growth rate	0.90%	0.46%	1.28%
Unemployment	9.7%	4%	10.8%

Source: mentioned under reference point 1

From the above data it is clear that India is quite far away from being a developed country, I would like to reiterate **Mr. Raghuram Rajan's** comment to my fellow Indians - **“Let India grow at 8-10% for 10 years before chest thumping”**. In order to be developed country, India needs successful implementation of E-governance with the use of ICT through planned government initiatives for at least next 10 years.

The “e” in e-Governance stands for ‘electronic’. E-Governance meaning “electronic Governance”, has evolved as an information-age model of governance that seeks to realize processes and structures for harnessing the potentialities of Information and Communication Technologies (ICTs) at various levels of government and the public sector and beyond, for the purpose of enhancing good governance (Bedi, Singh & Srivastava, 2001; Holmes, 2001; Okot-Uma, 2000). According to Riley (2001), “e-governance is the commitment to utilize appropriate technologies to enhance governmental relationships, both internal and external, in order to advance democratic expression, human dignity and autonomy, support economic development and encourage the fair and efficient delivery of services.” The use of internet not only delivers the services faster but also brings more transparency between the government and the citizens. While Governance relates to safeguarding the legal rights of all citizens, an equally important aspect is concerned with ensuring equitable access to public services and the benefits of economic growth to all. It also ensures government to be transparent in its dealings, accountable for its activities and faster in its responses as part of good governance. In developing countries like India, where literacy level is very low and most of the people are living below poverty line, it is very much difficult for the government to provide its services to such citizens via means of internet. Even the e-Readiness Rank of India is very low. According to the Global Information Technology Report 2016, the e-Readiness rank of India is 91 out of 139 with the score of 3.8 that means the use of ICTs in India is very low. Along with literacy there are many other factors like privacy, trust, cost and security related to user's personal information, digital divide, user friendliness of government websites, lack of awareness in people, low per Capita income etc. are also huge challenges for the implementation of e-Governance in India.

### RESEARCH OBJECTIVES

1. To analyze development of e-governance in India.
2. To analyze challenges of e-governance in India.
3. To focus on recent initiatives of e-governance.
4. To analyze impact of e-governance in reducing corruption, increase transparency and enforcing accountability.

### RESEARCH METHODOLOGY

Data is collected for this study from secondary sources such as books, journals and the Internet, and careful evaluation has been performed on the collected information. The main aim of this paper is to discuss about e-governance in India with its objectives.

**Development of e-governance in India** In India, the main thrust for e-Governance was provided by the launching of NICNET – The National Satellite Based Computer Network. This was followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments. NICNET was extended via the State capitals to all district headquarters by 1990. The Government approved the National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects and 8 components, on May 18, 2006. In the year 2011, 4 projects - Health, Education, PDS and Posts were introduced to make the list of 27 Mission Mode projects to 31 Mission Mode Projects. The Government has accorded approval to the vision, approach, strategy, key components, implementation methodology, and management structure for NeGP.

**Challenges for e-Governance in India** The obstacles in implementation of e-Governance in India are privacy, trust, cost and security related to user's personal information, user friendliness of government websites, lack of awareness in people, low per Capita income, illiteracy, low computer Literacy, population etc. These challenges are explained below:

<p><b>Low Literacy</b></p> <ul style="list-style-type: none"> <li>Literacy level of India as per Population Census of India 2011 is 74.04%</li> <li>Illiterate people do not have access to the e-Governance applications.</li> </ul>	<p><b>Cost</b></p> <ul style="list-style-type: none"> <li>Huge amount of money is involved in implementation, operational &amp; evolutionary maintenance tasks</li> </ul>	<p><b>Lack of awareness in people</b></p> <ul style="list-style-type: none"> <li>Indians are unaware of the benefits of e-Governance services</li> <li>Unawareness is a major challenge in the implementation of e-Governance projects.</li> </ul>
<p><b>Language barrier</b></p> <ul style="list-style-type: none"> <li>Of 780 languages, 22 are scheduled Indian languages</li> <li>E-Governance applications are written in English language which cannot be understood by majority of Indians</li> </ul>	<p><b>User friendliness of government websites</b></p> <ul style="list-style-type: none"> <li>Users of e-Governance applications are often non-expert users who may not be able to use the applications in a right manner.</li> </ul>	<p><b>Low per Capita income</b></p> <ul style="list-style-type: none"> <li>India's per capita income grew at a slower pace of 8.6 per cent during the last fiscal ended March 2018</li> <li>Online services are not offered at affordable price</li> </ul>
<p><b>Privacy and Security</b></p> <ul style="list-style-type: none"> <li>Privacy and security of an individual's personal data that he/she provides to obtain government services is a crucial challenge</li> </ul>	<p><b>Technologies should be trusted</b></p> <ul style="list-style-type: none"> <li>Implementation of public administration functions via e-Government requires that the user must be confident &amp; comfortable while using the technology</li> </ul>	<p><b>Population</b></p> <ul style="list-style-type: none"> <li>Population is close to <b>17.74%</b> of the total world population.</li> <li>Measuring population, keeping the database updated and then providing the e-governance services to the whole population are major challenges.</li> </ul>

**GOVERNMENT INTERACTION IN E-GOVERNANCE IS CLASSIFIED UNDER 4 CATEGORIES THROUGH VARIOUS INITIATIVES**

<p>G2C: Government to Citizen Initiatives                  Computerization of Land Records                  Bhoomi Project                  Gyandoot                  lokvani Project in Uttar Pradesh                  Project FRIENDS in Kerala                  e-Mitra Project in Rajasthan                  e-<i>Seva</i> (Andhra Pradesh)                  Admission to Professional Colleges – Common Entrance Test (CET)</p>	<p>G2B: Government to Business Initiatives                  e-Procurement Project in Andhra Pradesh and Gujarat:                  MCA 21: By the Ministry of Corporate Affairs.</p>
<p>G2G: Government to Government Initiatives  <i>Khajane Project in Karnataka</i>                  SmartGov (Andhra Pradesh)</p>	<p>G2E: Government to Employee initiatives                  E-payroll                  E-benefits                  E-training</p>

**Mission Mode Projects (MMP)**

Central MMPs	1. Banking ,Central Excise & Customs, Income Tax (IT), Insurance, MCA21 Passport, Immigration, Visa and Foreigners Registration& Tracking Pension, e-Office, Posts and UID
State MMPs	1. Agriculture, Commercial Taxes, e-District,Employment Exchange Land Records(NLRMP), Municipalities, e-Panchayats, Police(CCTNS) Road Transport, Treasuries Computerization, PDS, Education, Health
Integrated MMPs	1. CSC, e-Biz, e-Courts, e-Procurement, EDI For e-Trade, National e-governance Service Delivery Gateway and India Portal

**RECENT INITIATIVE**

**Digital India:** This program has been envisaged by Department of Electronics and Information Technology. The vision aims to transform the country into a digitally empowered society and knowledge economy. The

program will be implemented in phases from the current year till 2018. The Digital India is transformational in nature and would ensure that Government services are available to citizens electronically. It would also bring in public accountability through mandated delivery of government’s services electronically, a Unique ID and e-Pramaan based on authentic standard based interoperable and integrated government applications data base.

<p><b>MyGov citizen portal</b></p> <ul style="list-style-type: none"> <li>➤ Technology driven to provide people with the opportunity to contribute towards good governance.</li> </ul>	<p><b>E-Kranti scheme</b></p> <ul style="list-style-type: none"> <li>➤ To broaden the reach of internet services to rural areas in the country.</li> <li>➤ Expansion of ICT usage in agriculture and retail trade</li> </ul>	<p><b>Digital Cloud</b></p> <ul style="list-style-type: none"> <li>➤ Indian certificates to be stored in digital lockers.</li> <li>➤ Communication protocol established for government departments to access them without physically having to see the hard copy</li> </ul>
<p><b>M-governance</b></p> <ul style="list-style-type: none"> <li>➤ Use of mobile or wireless to improve Governance service and information “anytime, anywhere”</li> <li>➤ Improving the delivery of government information and services.</li> <li>➤ Increasing channels for public interactions.</li> <li>➤ Lower costs leading to higher participation of people.</li> </ul>	<p><b>Mobile Seva</b></p> <ul style="list-style-type: none"> <li>➤ It aims to provide government services to the people through mobile phones and tablets.</li> <li>➤ Integrate both web and mobile based services seamlessly</li> <li>➤ Enhances the access to electronic services</li> </ul>	<p><b>Mobile Applications Store (m-App Store)</b></p> <ul style="list-style-type: none"> <li>➤ The Mobile Governance Portal and the m-App Store can be accessed at <a href="http://mgov.gov.in/">http://mgov.gov.in/</a>.</li> <li>➤ <b>It hosts over 240 live mobile applications</b></li> <li>➤ The live applications can be downloaded and installed free of cost on a mobile phone by any person.</li> </ul>

**E-GOVERNANCE – AN ANTI-CORRUPTION TOOL**

Corruption is a global phenomenon. In developing countries, introducing e-governance to enhance transparency and accountability in public service delivery is gaining popularity. E-governance holds the potential to reduce corruption risks by limiting opportunities for discretion among public officials in interactions with citizens. By reducing the need for citizens to interact with so called “gatekeepers” to access public services, e-governance could serve to significantly reduce corrupt practices linked to these services. Corruption involves personal interaction between a departmental staff and the common man for the 'offer' and 'acceptance' of a bribe for any purpose. Inclusion of Artificial intelligence in all government services delivery platform will lead towards transparent and accountable service delivery system. The inadequacy of tech savvy people in this huge country is a hurdle for total implementation of e-governance. This hurdle is gradually reducing with the emergence of persons who are knowledgeable in e-governance.

**SUGGESTIONS**

Govt. should provide e-infrastructure, increase Government and Citizen interaction, encourage citizen participation in the Governing process and bring transparency in the governing process by making all the Government data and information available to the people for access. They should reduce the cost of Governance, reaction time to reply to people's queries and problems. Govt should provide free access of internet services in rural areas, improve literacy, promote m-governance and provide computer training free to reduce computer illiteracy. They should develop user friendly websites providing e-governance services in regional languages and make stringent cyber law.

**CONCLUSION**

We have seen how the concept of e-governance and m-governance has evolved in Indian scenario and how much it is required for transparency and accountability on the part of government and at the same time it is also a toll to increase the participation of people in policy making by empowering them with the right information at right time. E-governance is slowly but surely reducing corruption risks through improving monitoring of public officials and by reducing the need for citizen interaction with gatekeepers for key services. Initiatives taken by government in E-Governance project provide a roadmap for efficient delivery of services at the door step. But still there is no clear evidence from e-governance initiatives of a changing relationship between government and citizen or the emergence of “new spaces for citizens to participate in their overall development”. Although Indian government is spending a lot of money on e-Governance projects but still these projects are not

successful in all parts of India. Unawareness in people, local language of the people of a particular area, privacy for the personal data of the people etc. are main challenges which are responsible for the unsuccessful implementation of e-Governance in India. Government must take some actions to make the people aware about the e-Governance activities so that people may take full advantage of these activities and e-Governance projects can be implemented successfully. government has shown promise this regard, and in many instances it has delivered by eliminating or at least reducing corruption in public services delivery.

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## A STUDY ON SOLID WASTE MANAGEMENT AND RECYCLING WITH SPECIAL REFERENCE TO INDIA

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### ABSTRACT

*Solid waste disposal and management is both an urban and rural problem. Every person is a potential generator of waste and thus a contributor to this problem. To generate waste is one thing, the type of waste generated is another and yet also the way the generated waste is managed or disposed of is quite a different issue. This study considers the solid waste management system in India order to develop a framework for management in future. The objectives of this study were to describe and explain the current waste management system and practices influence of waste management. The objectives were addressed primarily through semi-structured interviews and discussions with various stakeholders along with non-participatory method tools. The study analysed the current solid waste management system and identified the strengths and the weaknesses of the system. It was observed that the current solid waste management system practiced is unsustainable. There is no provision for the segregation of waste. The collection and transportation of waste is inadequate and inappropriate. Officially, there is no provision for composting or recycling of the waste. Majority of the waste is dumped in open landfill and people are not involved in solid waste decision making process or the solid waste management system. Further, the study also analysed the newly proposed solid waste management system. It was found that the newly proposed system is better than the existing system; the new proposal outlines a framework of two stream waste segregation system. The proposed waste collection and transportation system is an improvement on the current system. Composting of biodegradable waste is an important feature of the proposal. The proposed system, however, omitted critical points which need to be addressed in order to develop a sustainable solid waste management system.*

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### 1.1 INTRODUCTION

Solid waste means any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded materials including solid, liquid, semi-solid, or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage. In Short, Solid wastes are any discarded or abandoned materials. Solid wastes can be solid, liquid and semi-solid or containerized gaseous material. Solid waste is the unwanted or useless solid materials generated from human activities in residential, industrial or commercial areas. It may be categorized in three ways. According to its:

- Origin (domestic, industrial, commercial, construction or institutional)
- Contents (organic material, glass, metal, plastic paper etc.)
- Hazard potential (toxic, non-toxin, flammable, radioactive, infectious etc.).

Solid Waste Management reduces or eliminates the adverse impact on the environment and human health. A number of processes are involved in effectively managing waste. These include monitoring, collection, transport, processing, recycling and disposal. The quantum of waste generated varies mainly due to different lifestyles, which is directly proportional to socio economic status of the urban population.

### 1.2 TYPES OF SOLID WASTE

It can be classified into different types depending on their source. The description of some of it is as follows:

- **Municipal Solid Waste (MSW):** It consists of household waste, construction and demolition debris (CnD), sanitation residue, and waste from streets, generated mainly from residential and commercial complexes. As per the MoEF it includes commercial and 2 residential waste generated in municipal or notified areas in either solid or semi-solid form excluding industrial hazardous wastes but including treated bio-medical wastes.
- **Industrial Solid Waste (ISW):** In a majority of cases it is termed as hazardous waste as they may contain toxic substances, are corrosive, highly inflammable, or react when exposed to certain things e.g. gases.
- **Biomedical waste or hospital waste:** It is usually infectious waste that may include waste like sharps, soiled waste, disposables, anatomical waste, cultures, discarded medicines, chemical wastes, etc., usually in the form of disposable syringes, swabs, bandages, body fluids, human excreta, etc. These can be a serious threat to human health if not managed in a scientific and discriminate manner.

## **2.1 BACKGROUND**

In a developing country, the problems associated with solid waste management are more acute than in a developed country. Lack of financial resources and infrastructure to deal with solid waste creates a vicious cycle; lack of resources leads to low quality of service provision which leads to fewer people willing to pay for said services, which in turn further erodes the resource base and so on. The problem is further complicated by rapid growth in population and urbanization, which adds greatly to the volume of waste being generated and to the demand for waste retrieval service in municipal areas. However, more often than not, an increase in population is not matched with an equal increase in revenue for the local municipalities for waste management. Besides this, rapid urbanization means rapid growth of shanty dwelling units that are largely unplanned for, and add to the waste, health, and hygiene problems. Another significant factor that contributes to the problem of solid wastes in a developing country scenario is the lack of proper collection and transportation facilities. Improper planning coupled with rapid growth of population and urbanization serves to add congestion in streets, and as a result the waste collection vehicles cannot reach such places, thus allowing filth to build up over time. Lack of monetary resources, at times, results in improper or no transportation vehicles for waste disposal adding another dimension to the ever rising cycle of problems. In any developing country, the threats posed by improper handling and disposal of solid wastes (though often ignored) contribute to the high level of mortality and morbidity. Human and ecosystem health is also threatened due to improper handling of solid wastes. In addition to all the problems mentioned above, mountainous regions in developing countries face additional challenges in solid waste management, in terms of their highly fragile environment and difficult terrain. The problems associated with solid waste in the mountainous region have serious cascading effects on the lower valley. Often solid waste is the number one threat to the fragile ecology of the mountainous environment. Besides this, seasonal tourist inflow adds significantly to the demands on resource base and contributes considerably to the amount of wastes generated. Lack of proper regulations fails to encapsulate the waste generated by the tourists and fees to be paid thereof.

## **3.1 SOLID WASTE MANAGEMENT**

General Description Municipal Solid Waste Management (MSWM) refers to a systematic process that comprises of waste segregation and storage at source, primary collection, separation, secondary storage, transportation, secondary segregation, resource recovery, processing, treatment, and final disposal of solid waste.

### **Landfills**

Landfills are created by land dumping. Land dumping methods vary, most commonly it involves the mass dumping of waste into a designated area, usually a hole or side hill but landfills may have negative impacts on soil, water and air. Landfills must be at just one place in a city but In India, it is found at many places. The Water of River Ganga is pure but it will be impure because it is made landfill on the river banks at North India. Actions must be taken in this regard by Municipal officers.

## **3.2 CURRENT STATUS OF WASTE MANAGEMENT**

India is the second largest nation in the world, with a population of 1.21 billion, accounting for nearly 18% of world's human population, but it does not have enough resources or adequate systems in place to treat its solid wastes. Its urban population grew at a rate of 31.8% during the last decade to 377 million, which is greater than the entire population of US, the third largest country in the world according to population. Big cities collect about 70 - 90% of MSW generated, whereas smaller cities and towns collect less than 50% of waste generated. More than 91% of the MSW collected formally is landfilled on open lands and dumps. It is estimated that about 2% of the uncollected wastes are burnt openly on the streets. About 10% of the collected MSW is openly burnt or is caught in landfill fires. Such open burning of MSW and landfill fires together releases 22,000 tons of pollutants into the lower atmosphere of Mumbai city every year. The pollutants include carbon monoxide (CO), carcinogenic hydro carbons (HC) (includes dioxins and furans), particulate matter (PM), nitrogen oxides (NOx) and sulphur dioxide (SO<sub>2</sub>).

## **3.3 CAUSE OF INCREASE IN SOLID WASTE**

- Unawareness in society
- Modernization
- Urbanization
- Increase in industrials manufacturing
- Population growth

### 3.4 POLY BAG BAN

The Government of India and the New Delhi Pollution Control Board issued a series of directions imposing a blanket ban on plastic carry bags at various sites in the country. The Pollution control board issued a circular restricting plastic carry bags in specific areas in the country. All manufacturers, distributors and users were directed to comply with the guidelines of the Board regarding use of plastic carry bags to avoid regulatory sanctions as provided under Section 5 of the Environment (Protection) Act, 1986, and also legal actions as warranted under Section 15 of the Environment (Protection) Act, 1986. Compliance, however, has been very sporadic throughout the country.

### 3.5 IMPACTS OF SOLID WASTE ON ENVIRONMENT

- Water pollution
- Air pollution
- Loss of biodiversity
- Epidemic diseases
- Land degradation
- Soil quality degradation

### 3.6 PER CAPITA MSW GENERATION

The per capita waste generation rate is strongly correlated to the gross domestic product (GDP) of a country. Per capita waste generation is the amount of waste generated by one person in one day in a country or region. The waste generation rate generally increases with increase in GDP. High income countries generate more waste per person compared to low income countries due to reasons discussed in further sections. The average per capita waste generation in India is 370 grams/day as compared to 2,200 grams in Denmark, 2,000 grams in US and 700 grams in China [9]. Waste generation rate in Indian cities ranges between 200 - 870 grams/day, depending upon the region's lifestyle and the size of the city. The per capita waste generation is increasing by about 1.3% per year in India [10]. Cities in Western India were found to be generating the least amount of waste per person, only 440 grams/day, followed by East India (500 g/day), North India (520 g/day), and South India. Southern Indian cities generate 560 grams/day, the maximum waste generation per person. 11 States with minimum and maximum per capita waste generation rates are Manipur (220 grams/day) and Goa (620 grams/day). Manipur is an Eastern state and Goa is Western and both are comparatively small states. Among bigger states, each person in Gujarat generates 395 g/day; followed by Orissa (400 g/day) and Madhya Pradesh (400 grams/day). Among states generating large amounts of MSW per person are Tamil Nadu (630 g/day), Jammu & Kashmir (600 g/day) and Andhra Pradesh (570 g/day). Among Union Territories, Andaman and Nicobar Islands generate the highest (870 grams/day) per capita, while Lakshadweep Islands (340 grams/day) generates the least per capita. Per capita waste generation in Delhi, the biggest Union Territory is 650 g/day. 3.8 Landfills Fires A 2010 study by NEERI, "Air Quality Assessment, Emissions Inventory and Source Apportionment Studies: Mumbai" found out that open burning and landfill fires are a major source of air pollution in Mumbai. The study found that about 2% of the total MSW generated in Mumbai is openly burnt on the streets and 10% of the total MSW generated is burnt in landfills by humans or due to landfill fires.

### 4.1 INTEGRATED SOLID WASTE MANAGEMENT

#### 4.1.1 Waste Storage and Segregation

Practice of waste to be stored at source of waste generation till collected (for its treatment and disposal) is essential as it helps enable waste to be collected at a pre decided time before it is indiscriminately thrown on streets causing pollution.

#### 4.1.2 Transfer Stations

A transfer station is a place in the waste collection stream where waste is transferred into a larger vehicle from many smaller collection vehicles (used for primary and secondary collection) in order to transport it for a longer distance. In this way, the transfer station provides economies of scale while transporting waste by using a large vehicle having greater capacity to travel for longer distance instead of many vehicles having smaller capacities.

#### 4.1.3 Conveyors Transportation

In some plant in India, the waste is dumped at ground level and fed into a traveling grate, stoker fired boiler by inclined conveyors. Both facilities generated above 6.6 MW (more than design power) during their initial years of operation. Even though some plants are not running, the boiler is still working and is operated twice every month to maintain the machinery.

#### 4.1.4 Reduction in waste generation

“Prevention is better than cure”, so goes an old adage, and it is one of the best method to deal with the problem of solid waste. By preventing (reducing) the generation of waste itself, we can minimize other problems (namely, disposal) related to waste to a great extent. In order to reduce waste generation several methods or tool can be applied, some of which may be:

- Enacting public policies that discourage the production, sale and consumption of products containing unnecessary packaging material. Places where flow of products cannot be controlled appropriate policy measures (extended producers responsibility, taxes, economic incentives etc.) should be put in place to discourage unnecessary waste generation. Policies should also look into the aspect of encouraging reusable and recyclable products instead of disposable products.
- Promotion of local grown products and less reliance on packaged food products go a long way in reducing wastes.
- Education can play a critical role by creating awareness regarding the waste and related issues among the masses. In a developing country framework, reduction in waste generation should be targeted towards producers; because of excessive packaging, more waste is created. From the consumers’ side, reduction in waste can be generated by educating the consumers on ways to prevent waste; for instance asking the consumers to use a reusable bag for shopping rather than rely on goods being bagged in numerous poly bags, can significantly reduce the use of poly bags which are the main source of waste in numerous developing countries.

#### 4.1.5 Reuse and repair

Reusing relates to the recovery of items to be used again. Reusing ensures reduction in raw material consumption saves energy and water, reduces pollution and prevents the generation of waste. Regards reuse of materials and products as more socially desirable than recycling the same materials. For instance, in India, soft-drinks (Coke, Pepsi etc.) are sold in glass bottles and a 17 deposit-refund system operates. A person deposits some amount of money on purchase of the soft drink, which he/she gets back on depositing the bottle, thus enabling the producer to regulate his supply of container without having to produce new ones. Products, such as office furniture and appliances, can also be reused. For instance Manitoba Hydro donated their old office furniture and building waste to Manitoba eco-network, which was used to build a new office for the network; thus saving both time and valuable resources for both Manitoba Hydro and Eco-network. A reuse program not only saves money, it also can be a source of revenue for the companies/households that implement it. The best example would be Interface, which reuses old carpets to produce new ones, thus saving valuable resources and promoting sustainability at the same time. Public policies that provide incentives for businesses and individuals to engage in reuse can have a significant and positive economic and environmental impact. In a developing country framework, it is to be noted that due to poor economic conditions, repairing and reusing of materials and products is a standard practice, and generally people in the developing countries reuse much more than people living in the developed countries.

#### 4.1.6 Recycle

Although recycling is one of the most important aspects of waste management in the developed nations, due to the composition of waste and other factors, recycling may not be much of an option in terms of developing country. Separation of waste materials at the household level is perhaps a universal phenomenon; more so in developing countries where separation of anything valuable is undertaken with care, which prevents valuables and reusable materials from being discarded. The existence of waste pickers, scavengers etc., recover other valuable materials from entering the waste stream. Especially in developing countries, itinerant buyers play a vital role in recovering materials for recycling; they buy every material that has some monetary value, news papers, plastic bottles, old shoes etc. It is however, evident that some improvement in these traditional systems can be brought about. A formalized waste recycling or recovery system supported by local municipality can go a long way in ensuring health safety for the workers, chances of better income for the rag pickers, scavengers and small time merchants dealing with waste.

Recycling waste can be a viable economic option even for some urban cities, where the nature and characteristics of waste is quite similar to the developed nations. In case of waste composition not favouring recycling, other options (recovery, diversion etc.) should be seriously considered. In the event that local municipal governments are unable to provide recycling facility due to lack of funds, private partnerships need to be encouraged and looked into as a viable option.

#### 4.1.7 Solid Waste Treatment by Incineration

Incineration is the process of burning of wastes under controlled conditions, usually carried out in an enclosed structure. Although incineration has high rate of waste reduction (80-95%), there are many issues that make incineration not so viable an option in developing countries (World Bank 1999). Solid waste incineration plants tend to be among the most expensive solid waste management options, being highly capital-intensive and require high maintenance costs they may be beyond the reach of many of the lesser developing countries. As compared to other solid waste management options, incineration requires comparatively higher technically trained operators, and careful maintenance (World Bank 1999); which may not be practical or feasible for the developing countries. Besides this, there is a huge environmental hazard component of incineration; generally most of the developing countries are densely populated and any incineration operation near human habitat can pose a great threat to human life and environment because of emissions. Use of scrubbers in incineration can reduce the threat greatly. However, it requires huge financial contribution, which may not be possible for developing countries to bear (Medina 2002).

Another major hurdle towards proper functioning of incinerators in developing countries is the nature and composition of waste, due to high moisture content in waste, the incinerators do not function as efficiently as in developed countries, thus posing extra burden on the exchequer. According to Medina, in Lagos, Nigeria, incinerators were built at a cost of U.S. \$ 10 million, but because of high moisture content of the wastes, extra fuel had to be added in order to maintain combustion, which significantly increased the cost of incineration process. The result was that the incinerators never operated normally. One was abandoned and the other turned into a community centre. Similar experiences have been observed in India, Mexico, the Philippines, Indonesia, and Turkey.

#### 5.1 HEALTH PROBLEMS

Serious public health problems arise due to uncollected solid waste and waste often leading to many infectious diseases including water borne diseases such as cholera and dysentery. Such incidence of diseases puts additional burden on the scanty health services available in resource poor developing countries. Insect and rodent vectors are attracted to the waste and one may recall that as many as 200,000 people had to flee after the outbreak of pneumonic plague in Surat in Western India (1994). The outbreak is attributed to the uncontrolled fermentation of wastes which created favourable conditions for the breeding and growth of rodents and insects that acted as vectors of diseases. A similar study by WHO (1995) observed in 1994 that 616960 cases of cholera resulting in 4389 deaths were reported in Angola, Malawi, Mozambique and Tanzania (UNCEA 1996) which can be linked to the fact that in Northern Africa as much as 20 to 80 per cent of urban solid wastes are dumped in open spaces. Contamination of ground water by disease causing organisms from water seeping through dumps is likely to include the viruses of hepatitis, poliomyelitis and gastroenteritis; thus such water contamination may have long run health effects apart from dysentery and cholera. The U.S. Public Health Service identified 22 human diseases that are linked to improper solid waste management. The most immediate health threat due to solid waste in developing countries is to the waste workers, rag pickers and scavengers. Waste workers and rag pickers in developing countries are seldom protected from direct contact and injury. The disposals of hazardous and medical wastes with municipal wastes pose serious health threat. Exhaust fumes from waste collection vehicles, dust stemming from disposal practices, and open burning of waste also contribute to overall health problems (Hoornweg et al 1993).

The magnitude of the health problems due to solid waste in case of developing countries are particularly alarming where the proper collection and disposal of solid waste is impeded by paucity of funds and technological capacity. The areas, which are not serviced, are left with clogged sewers and litters which create serious health problems for the resident population. Crowding and unsanitary conditions are important amplifiers of the transmission of infectious diseases. Many infectious diseases thrive where there is a lack of water, and inadequate drainage, sanitation and solid waste removal. In a report prepared for the World Health Organization (WHO), recognized seven different ways, through which pollutants can transport back to affect human health.

Waste → soil → human. Waste → soil → plant → human.

Waste → soil → plant → animal → human.

Waste → soil → atmosphere → human.

Waste → soil → surface runoff → surface water → human.

Waste → soil → vadose zone → groundwater → human.

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Waste → soil → animal → human, waste → soil → airborne particulate → human

Hence, we find that in case of improper handling waste will eventually move back into the system and cause further harm to human health through the bio magnifications of toxins.

### **6.1 CONCLUSION**

On the basis of above account solid waste is one of the most important environmental issues in general and in developing countries in particular. Mismanagement of solid waste is not only hazardous to public health but also affect the whole ecosystem of the surrounding area. There is lots of solid waste generation due rapid technological development, growth in industrial sector, urbanisation and population explosion. One must adopt natural ways to manage solid waste as far as possible to prevent environment from being further polluted. We must adopt the sustainable way of development.

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**THE CORRELATION BETWEEN COLLEGE STUDENTS' INTERNET AND MOBILE PHONE ADDICTION AND MENTAL HEALTH IN MUMBAI****Dr. Seema Ukidve**

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**ABSTRACT**

*This study is aimed at constructing a correlative model between Internet addiction and mobile phone addiction; the aim is to analyse the correlation (if any) between the two traits and to discuss the influence confirming that the gender has difference on this fascinating topic; taking gender into account opens a new world of scientific study to us. Females. Moreover, this study issued mobile Phone Addiction Scale and Internet Addiction Scale to conduct surveys on the participants and adopts the structural equation model (SEM) to process the collected data. According to the study result, (1) mobile phone addiction and Internet addiction are positively related; (2) female college students score higher than male ones in the aspect of mobile addiction. Lastly, this study propose relevant suggestions to serve as a reference for schools, college students, and future studies based on the study results.*

*Keywords: Mobile, Internet, Correlation coefficient college students, Gender difference*

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**INTRODUCTION**

The current modes of information and communication technology such as computers, the Internet, and mobile phones have changed adolescents' daily life drastically. In addition to being a convenience to people's communication methods, technology unfortunately has negative side-effects. The most frequent negative side-effects is chronic addiction to technological mediums or excessive human-machine interactions involved. People rely on technological devices to a level of full-blown addiction to obtain pleasure as a psychological benefit.

According to Griffiths [5], technological addiction is a subcategory of behavioural addiction. He defines it as a behavioural addiction which involves human-machine interaction and is nonchemical in nature.

However, if speaking from the perspective of substance-based addictions, technological addiction does not produce recognizable signs or features (e.g., the biological indicators of nicotine addiction), and the addicts may develop unacceptable social behavior and attitude in their daily routines or social life [5,6]. In this case, there is no denying that technological addiction has caused a negative impact on an individual's life in a harmful manner.

One must also take into account that some activities like online role playing games may influence Internet users to a higher level of addiction, such as sending and receiving emails, browsing through sites and messages, and uploading or downloading files [8]. Both the Internet and mobile phone addicts are believed to have an unhealthy lifestyle and similar personalities. Moreover, Internet addiction and mobile phone addiction may closely related [9]. However, studies on analyzing the correlation between Internet addiction and mobile phone addiction are rare. Therefore, this study is aimed at discovering the further relationships between these two, to serve as a reference for guiding students' college life.

**LITERARY REVIEW****1.1. Internet Addiction and mobile phone Addiction**

Internet and mobile phone may have similar personalities and lifestyles; there is a significant correlation between the two. First of all, Internet addicts and substance users also tend to have similar personalities. As such, the two may have related mental illnesses or mechanisms.

Studies clearly indicate that misuse of the Internet is strongly associated to a number of psychological and behavioural problems. For instance, there exist a great deal of relevance between the misuse of the Internet and issues such as anxiety, depression, loneliness, social isolation, low self-esteem, shyness, abnormal mood swings, precipitated behaviour, and lack of social skills and support regarded as a possible competitor regarding nicotine addiction since both fulfill the same need and result in financial exhaustion[31].

This study is aimed at discussing the relation between Internet addiction and mobile phone addiction, and how college students of different genders vary in the means of the two so as to construct a correlation model of Internet and mobile phone addiction. The variables of Internet addiction in the model include the tolerance of Internet addiction, compulsive Internet use and withdrawal syndrome from Internet addiction, interpersonal relationship and health issues, and time management. Those of mobile phone addiction include time management, school performance, and substitute satisfaction.

First, the study adopts descriptive statistics to analyze college student’s self-reported situations of Internet addiction and mobile phone addiction. Then, the study selects a t-test to analyse how male and female students vary in various scale aspects and the overall scores, then they adopt bivariate correlations to assess the relation between

**Table-1: Summary of the means, standard deviation, and range of variables.**

Tolerance of Internet addiction	0.01/-0.66	-0.22/-0.49	20.05 ± 7.83	20.48 ± 7.41	0.32
Impulsive Internet use and withdrawal Syndrome from Internet addiction	0.47/-0.10	0.37/-0.33	16.45 ± 7.12	17.03 ± 7.02	0.65
Interpersonal relationship and health issues	0.29/0.62	0.45/0.11	13.66 ± 6.11	12.89 ± 5.57	1.20
Total scale	0.16/-0.24	0.16/-0.22	69.06 ± 25.33	68.24 ± 22.54	0.35
**p<0.01; ***p<0.001.					

**Correlations between Variables**

The means, standard deviation, and correlation coefficient of the variables are show in table 2. According to the analysis concerning the data of male college students, there is a significant positive correlation among all variables, and the correlation coefficients of “compulsive Internet use and withdrawal syndrome from Internet addiction,” “interpersonal relationship and health issues,” and “time management” in the aspect of Internet addiction are all above 0.2.

**Table-2: Summary of the correlation coefficient of mobile addiction and Internet addiction (n male = 72, nfemale = 56).**

Tolerance of Internet addiction	0.25	0.15	0.20	1	0.65	0.62	0.60
Impulsive Internet use and withdrawal syndrome from Internet addiction	0.18	0.12	0.22	0.71	1	0.55	0.52
Interpersonal relationship and health issue	0.31	0.28	0.20	0.58	0.51	1	0.62

Note: the lower left value is the correlation coefficient of female college students, while the upper right value is that of male college students.

\*P < 0.05; \*\*P<0.01; \*\*\*P<0.001.

**RESULT**

Firstly, according to the results of the study, it was discovered that mobile phone addiction and Internet addiction are significantly positively correlated, which conforms to the study of Beranuy et al. [9]. In other words, the technological addiction of college students has gone beyond the Internet; they are addicted to mobile phones as well. Because of their technological addiction, college students tend o indulge themselves on the Internet and on mobile phones, and they may experience depression and negative emotions if they do not have them.

Technological addiction has a great impact on college students in terms of their mental health, interpersonal relationship, and health. It was also shown that there is no significant difference in gender between college students’ mobile phone addiction and Internet addiction. For both male and female college students, the more addicted to the Internet they are, the higher the possibility of becoming addicted to mobile phones.

Though this study has obtained two important results, namely, that the correlation between Internet addiction and mobile phone addiction is positive and female college students are more addicted to mobile phone than



male ones, there are still some restrictions needed to be taken into consideration when interpreting the findings of the study.

### SCOPE & LIMITATION

A high percentage of the study's participants are freshmen. Also, there were more male participants

Than female ones, making this study somewhat weak in terms of representation. Secondly, both the Internet addiction and mobile phone addiction surveyed by this study do not reach the extent of clinical level, and the correlation between the two types of addiction can only reflect the preliminary study on how college students use the Internet and mobile phone. As for the substitution of mobile phones for the Internet, it will still need further studies to conduct analysis in the manner of experiment and longitudinal studies.

This study result it also a good reference for future studies. Since this study is aimed at discussing the correlation and gender difference between college students' Internet addiction and mobile phone addiction and concludes that the two may share similar personalities and lifestyles, it is worth exploring whether these personalities and lifestyles will strengthen or weaken the two types of technological addictions. On the other hand, it is worth discussing if a college student has to have a certain personality to become both an Internet and a mobile phone addict, which can serve as a reference to identify technological addiction and guide college students. Lastly, future studies are advised to design a technological addiction scale based on this study result to serve as a tool to identify the negative effects of technological development on adolescents in the future.

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**ARTIFICIAL INTELLIGENCE IN GIS**

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**ABSTRACT**

*Geographic Information system gets flooded with huge amount of data into its database. These types of data are known as spatial data which includes details collected from satellite imagery, digital map, location details. Spatial database needs integration of techniques from various disciplines to achieve maximum optimization of data. One of the field which gives best results of optimization by performing iterating functions on data is known as Artificial Intelligence. The proposed paper concentrates on the combination and association of these two major disciplines namely GIS and AI.*

*Keywords: GIS, AI, Fuzzy logic, neural network.*

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**INTRODUCTION**

GIS is flooded with vast amount of data getting gathered every moment and Artificial intelligence is a technique which runs on getting the best results from the huge dataset by applying variety of AI algorithms. The proposed paper concentrates on the connection and association of Artificial Intelligence and GIS in the current scenario and future of AI in GIS. a number of applications and techniques in GIS involves analysing, problem solving and decision-making skills. These skills can be efficiently modelled using Artificial Intelligence. The term GIS has various meanings associated with it. It's an umbrella term for earth science, geography, cartography etc. AI is widely used to represent the knowledge acquisition, computer vision, classification, spatial data representation. Indian government has proposed policies under NITI Aayog related to AI. The paper highlights the area of GIS and the techniques under Artificial Intelligence that can be collaborated to achieve our goals. The paper proposes techniques in the field of AI which will suit GIS. The detailed enhancement will be the future scope of the paper

**1. ARTIFICIAL INTELLIGENCE**

Artificial Intelligence enables machines to act with higher level of intelligence and emulate the human behaviour. The effective and optimization techniques of AI make it possible to process huge amount of data and to analyse the details in it. AI augments the ability to learn from experience and keep adapting over time. Areas like urban planning, crime analysis, changes in environment, transportation comes under GIS. These areas could be effectively explored with the techniques of AI

**2. MODELS**

**2.1 Fuzzy Logic**

Systems in GIS are decision driven and knowledge driven. They need techniques for getting values for utilizing and handling spatial data, predicting values for decision support systems, pattern recognition. As a powerful tool fuzzy logic provides an efficient methods for measuring spatial correlation between spatial features such as location of mineral deposits and distance from contact zones. Fuzzy is an area which talks about those aspects where the data is not in the form of binary form. Eg slope of an elevation is less than 20degree. This technique can be best utilized in the field of GIS which deals with archaeology and construction. Different forms of fuzzy logics have been proposed in many research papers which talks about getting best values of fuzzy variables and weights of fuzzy evidence. The method begins by first defining the objective of study in GIS. The algorithm for fuzzy logic concentrates on getting the values of weights and evidences between 1 and 0 and like our brain works it compares the values with certain threshold. For determining the values for weights and function already available spatial data in the vicinity of the objective function is selected. Multiple iterations are carried out by the expert systems and decision support systems to predict the unknown values. Fuzzy logic will be helpful in decision making and getting advices in the field of agriculture where the prediction of soil health, disease identification herbicide optimization.

**2.2 Neural Network**

As a part of Global change in climate and ecosystem, it is necessary to anticipate the changes based on the already collected datasets of GIS. Artificial intelligence provides techniques which provides means for predicting the future environmental changes. Artificial Neural Network is one of the efficient technique to explore the interaction amongst the parameters of the trends observed. These patterns are employed for modelling and predicting the behaviour of the new datasets. Neural networks work on artificial neurons that uses techniques for information processing just like a human brain. Self-processing and adaptation are the important features of neural network, which models the complex relationships between spatial inputs and

outputs. A layer involving the spatial distribution of input parameter is developed within GIS. The neural network is trained with the independent data set for capturing the changes in the environment. Neural network is dependent on the data collected by remote sensing. Satellite provides a means for gathering such types of data in huge amount.

## **2.2 Knowledge Map**

Knowledge map helps us to find out the knowledge from a huge amount of data. GIS deals with the issue of optimizing distribution of resources like planting in the specific area, plan for constructing a new township, how a company decides its franchise to be located at different places. Knowledge based systems are expert systems based on the organization of the patterns and knowledge stored inside the dataset. Tools are being developed to support decision making involving knowledge based approach in GIS which aims at computing a map for problem solving with the production rules of environment and geographic Information systems. The trends of crime rate, remedial measures to prevent such types of crime could be analysed using knowledge map tools.

## **3. CONCLUSION**

Artificial intelligence is used comprehensively in GIS applications. Artificial intelligence has power to solve complicated problem and information processing giving best possible results. Enhanced and intelligent GIS can be achieved using Artificial intelligence. The government policies have huge scope for collating AI in various fields of GIS. The proposed paper is a means to identify how AI techniques will be beneficial in the government policies proposed. As an enhancement each mentioned technique will be studied in depth and an algorithm would be proposed to explain the concepts.

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**DIGITAL ECONOMY CHALLENGES AND OPPORTUNITIES IN INDIA**

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**ABSTRACT**

*Innovations in information and communications technologies have created a digital revolution that is changing the way the world works, learns, communicates and transacts business. The digital economy is the new productivity platform that some experts regard as the third industrial revolution. The digital age is transforming everything: the nature of markets and products, how to produce, how to deliver and pay, the scale of capital to operate globally, and human capital requirements. It is also boosting productivity, exposing companies to new ideas, technologies, new management and business models, and creating new channels of market access. And all of this at relatively low costs. It is no exaggeration to predict that firms will increasingly rely on artificial intelligence for basic routines and for more complex tasks.*

*The digital economy also permeates all aspects of society, influencing the way people interact and bringing about broad sociological changes. The digital economy has the potential to radically change the social environment and economic activities of Asia.*

*Digital economy is a term that merely refers to a country's economy that's based on digital payment technologies. India comprises of 15 per cent of the world population, and with a growth rate of 7 to 8 per cent, India can very well become the second largest economy by 2030. To achieve this, the government considers the digital economy as the primary growth enabler. By implementing digital payment methods, like Digital Point of Sale, Unified Payments Interface, mobile wallets, Mobile Point of Sale, etc., our country is moving towards creating a digital economy that will benefit the people and the government in various ways.*

*Opportunities: Removal of Black Economy, Increase in Revenues, Empowerment to People, Paves the way to e-governance and Creation of new jobs.*

*Challenges: In the emerging "digital economy," the players as well as the rules of the game are changing fast. Along with it has come a lot of confusion and uncertainty. The digital economy may bring potential invasions of privacy, more sophisticated and far-reaching criminal activities and host of other unknown problems.*

*Future Prospects: According to the World Bank, "nearly a billion Indians are still not able to tap the benefits of a digital economy." To move towards a digital India and achieve a better growing economy, every single citizen must use digital payments even for their petty expenditures. In this paper presents on overview of digital economy challenges and opportunities in India*

*Keywords: Digital, Economy, India, Opportunities, Revolution, Challenges.*

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**INTRODUCTION**

Digital economy refers to an economy that is based on digital computing technologies, although we increasingly perceive this as conducting business through markets based on the internet and the World Wide Web. India's challenge to becoming a digital economy remains formidable. The government has announced Digital India; Make in India; Start-up India; and innovative applications of Aadhaar such as JAM (Jan Dhan Yojana –Aadhaar - Mobile trinity) and Digital Lockers. Introduction and implementation of these programmes can make up for some of the lost time. But India also needs to do more by strengthening the basic foundations of its digital economy. India is on track to become the youngest country in the world by 2020 and its digital economy is expected to balloon from \$413 billion today to \$1 trillion dollars by 2025. Therefore the study is an important one.

**REVIEW OF LITERATURE**

India's new leadership considers the digital economy as a major growth enabler. Primary benefits of India's public sector are increased revenue; reduced costs; higher employee productivity; improved safety and security; improved environment; enhanced citizen experience, and better health and well-being.

India's economy is rapidly converting into a digital economy, with the latter expected to touch the \$1-trillion mark by 2022, a top Finance Ministry official said. By 2030, India will be a \$10-trillion economy, with half of this accounted for by the digital economy,

Subhash Chandra Garg, Secretary, Department of Economic Affairs, said 8 per cent GDP growth is achievable for the Indian economy, but may require some hard work. "Good days are ahead. The Indian economy is on the stage of a take-off," he said.

A large part of India's digital journey is now being driven by new trends such as Artificial Intelligence, the Internet of Things and Machine Learning, Garg said. Later, when asked as to what was driving optimism that the digital economy would touch the \$1-trillion mark by 2022, Garg told Business Line there has been a proliferation of unicorns from India. "India has at least 13 unicorns already. More are coming, we are going to see an enormous conversion of our economy into a digital economy in the coming years," he said.

According to analysts, the Digital India plan could boost GDP up to \$1 trillion by 2025. It can play a key role in macro-economic factors such as GDP growth, employment generation, labour productivity, growth in number of businesses and revenue leakages for the Government. As per the World Bank report, a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38% respectively in the developing countries. India is the 2nd largest telecom market in the world with 915 million wireless subscribers and world's 3rd largest Internet market with almost 259 million broadband users. There is still a huge economic opportunity in India as the tele-density in rural India is only 45% where more than 65% of the population lives. Future growth of telecommunication industry in terms of number of subscribers is expected to come from rural areas as urban areas are saturated with a tele-density of more than 160%.

The global digital economy crossed an important milestone recently: the number of internet users in two countries — China, with just over 800 million users, and India, with 500 million users – surpassed the aggregate number of internet users across 37 OECD countries combined. In both countries, users spend more time on the internet than the worldwide average of 5.9 hours per day. They also have room to grow; China has just under 60% of its population online, while India, with one of the lowest rates of internet penetration in the world, has under 25% of its population online.

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

To study the concept and role of the digital economy in India, particularly how digital technologies impact on India and Asia economies and transform both business practices and societies.

To examine the importance of digital economy programme

To study the issues related to digital flows and innovation on digital economy; and implications of digital transformation on India's economic landscape.

To find out the challenges faced in implementation of this programme.

#### **RESEARCH METHODOLOGY OF THE STUDY**

The paper is based on the secondary data and the information is retrieved from the internet via journals, research papers and expert opinion and views on the same subject matter.

#### **INDIA AND DIGITAL ECONOMY - OPPORTUNITIES**

India comprises of 15 per cent of the world population, and with a growth rate of 7 to 8 per cent, India can very well become the second largest economy by 2030. To achieve this, the government considers the digital economy as the primary growth enabler.

How will government benefit from digital economy?

By implementing digital payment methods, like Digital Point of Sale (Digital POS), Unified Payments Interface (UPI), mobile wallets, Mobile Point of Sale (mPOS), etc., our country is moving towards creating a digital economy that will benefit the people and the government in various ways. Some of the primary advantages that government witnesses from the digital economy are:

**Removal of Black Economy:** When the transactions are made digitally, they can be easily monitored. Any payment made by any customer to any merchant will be recorded. This way, there will be no means for illegal transactions to occur. By restricting the cash-based transactions and using only digital payments, the government can efficiently expel the black economy.

**Increase in Revenues:** This is one of the most obvious and common benefits of the digital economy. When the transactions are digitized, monitoring sales and taxes becomes convenient. Since each transaction is recorded, the customers will get a bill for their purchase, and the merchants are bound to pay the sales tax to the government. This, in turn, increases the revenue of the government – thus resulting in growth of the overall financial status of the country.

**Empowerment to People:** One of the biggest advantages of moving towards digital economy is that it gives an empowerment to the citizens. When the payments move digital, each and every individual is bound to have a bank account, a mobile phone, etc. This way, the government can easily transfer the subsidies directly to

Aadhaar-linked bank accounts of people. In short, people no longer have to wait to receive the incentives and subsidies that they are bound to receive from the government. This feature is already in place in most cities. One example of that would be the LPG subsidy that government gives to the common people. This subsidy payment is done via bank transfers these days.

**Paves the way to e-governance:** The quicker, safer, and more efficient alternatives to traditional governance, e-governance will be the ultimate outcome of the digital economy. From birth certificate to death certificate, everything is available online – thus it is convenient for people to access the information they need on the go. Digital economy will definitely pave a way to e-governance, where delivery of all government services would be done electronically.

**Creation of new jobs:** The digital economy has a lot of potentials to enhance job opportunities in new markets as well as increasing employment opportunities in some of the existing occupations in the government. This way, the unemployment rate in the country is bound to decrease.

As Abraham Lincoln rightly said, “Government of the people, by the people, for the people, shall not perish from the earth.” Whatever the government benefits from digital economy, directly have a positive impact on every citizen’s life.

However, the let-down here is that according to the World Bank, “nearly a billion Indians are still not able to tap the benefits of a digital economy.” To move towards a digital India and achieve a better growing economy, every single citizen must use digital payments even for their petty expenditures.

India’s authorities have been focus on low-cost access to digital tools and on creating an open and interoperable infrastructure. The country has embarked on a broad Digital India initiative that encompasses everything from broadband “highways” to e-governance to digital literacy. There are also plans to establish 100 “smart cities” across India in collaboration with public agencies and private companies.

As the core visionary behind this initiative, technology pioneer and Infosys co-founder, Nandan Nilekani, writes, the essential idea was to “empower users with the technical and legal tools required to take back control of their data.”

Nilekani led the initiative that produced such a system, Aadhaar, which has enrolled 1.2 billion citizens. Aadhaar has become the foundation for an “India stack”, the world’s largest API that allows any enterprise, private or public, to build services and linking them to each individual’s unique identity.

## CHALLENGES

**Languages:** Language poses a high barrier to entry or growth for any company. Less than 100 million out of India’s 700 million literate populations can read or write English. There are 32 different languages with a million - plus speakers each across India, In India, 90% of the country’s registered publications do not have a website because of language barriers and 95% of video consumption is in local languages. It is essential to crack at least five Indian languages to truly break into this market.

**Protectionist policies:** While China’s protectionist policies are transparent, India’s protectionist agenda is in the form of regulations and red tape. For example, a recently proposed Indian government policy on e-commerce and a similar order from the country’s central bank seeks to prohibit data on Indian e-commerce consumers from being stored outside India. Many international players view this as favoring home grown digital companies and a case of India borrowing from China’s play book, that mandates local storage of Chinese user data considered “sensitive”.

## New technologies

In the next couple of years, Blockchain technologies will consolidate and be applied to different and innovative uses increasing transparency and decentralization of information. New models will challenge how organizations store and manage data transactions and enable internet based companies develop new financial products and services. The expansion of internet of things will create zillions of data sources capable of measuring and combining physical and digital data to create and expand products and services, such as Biometrics authentication. Quantum computing will open new opportunities for a real-time based economy and mobile devices will have computing power.

## New competitors

After an early and atomized stage of fintechs entering the financial market, new large competitors will form digital banks and challenge conventional industries. Smaller fintechs will probably specialize in specific sectors and will concede space to large corporations such as Apple, Google and Facebook which will focus on online payments and general financial services to their clients.

**New regulations**

In Europe specially, new regulations such as the second version of Payments Service Directive (PSD2) and the General Data Protection Directive aim to transform the financial industry and stimulate competition in the financial sector and provide more security against fraud. In a more competitive, diversified and open market, companies will struggle to offer services at lower rates.

**New customers**

Millennials and following native digital generations will tackle current digital challenges differently. The robotization of the economy and new measures like the universal income become a reality. Citizens spend less time working and increase their capacity to consume. The debate about privacy will enter in a new phase and individual users will count on newer resources to exploit their personal data, such as personal data lockers. On the one hand, individuals will be less afraid of trading their data, and data collectors will have to pay more for the personal data they can collect.

**New business models**

A world without cash will become a reality soon. All transactions being digital will help companies gather a complete picture of their market and understand more clearly market opportunities. A completely digital world will make financial services more transparent and accessible, and will create opportunities for a multimodal explosion like augmented reality, will allow customers to analyze the value of a building or calculate the cost of a mortgage for a specific car. Data marketplaces will enable new business to acquire data they do not produce and generate new products and services. Crowdfunding will leave space for crowdlending.

**New global threats**

New global threats will continue to expand and transform the economy. The sharing economy will find a better legal framework and continue to advance. Massive hacking will force countries and companies to heavily invest in security and political systems will suffer recurring crisis derived from the persistent security crisis.

**SUGGESTIONS**

This study suggests that narrowing the digital gap is within India's reach. If international technology players and investors were to consider where they might intervene in India's digital economy and provide leverage to the country's policy objectives, they can participate in India's digital economy while helping it accelerate and narrow the gap with China and other Asian countries, a perennial economic rival. If this happens, India's economy could even catch up to China's. It is important for businesses, innovators, and policymakers to be aware of this potential for convergence between the two great powers of the digital south just as much as they see the differences in order to make wise strategic choices for approaching the two most essential digital markets

**CONCLUSION**

The digital economy has the potential to radically change the social environment and economic activities of Asia. It is already experiencing high growth, rapid innovation, and broad application to other economic sectors. However, despite the vast opportunities presented by the digital economy, Asia has not yet fully realized the potential of harnessing digital technology for sustainable development, due to (among others) poor ICT infrastructure, inadequate skills development, and socioeconomic barriers that prevent much of Asia's population from engaging in the digital economy. A digitally connected India can help in improving social and economic condition of people through development of non-agricultural economic activities apart from providing access to education, health and financial services. However, it is important to note that ICT alone cannot directly lead to overall development of the nation. The overall growth and development can be realized through supporting and enhancing elements such as literacy, basic infrastructure, overall business environment, regulatory environment, etc.

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**EFFECT OF DIGITAL INDIA**

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**ABSTRACT**

*Digital India initiative transforms the lives of Indians in various ways and will empower the different class of society in a better manner. Digital India is the outcome of many innovations and technological advancements. An initiative under the prime ministership of Shree Narendra Modi 'Digital India' programme responsible for new progressions in every sector. The main aim of Digital India programme is to build participative, transparent and responsive system. The Digital India programme is a flagship programme of the Government of India with vision to transform the entire ecosystem of public services through the use of information technology. Government of India has approved the 'Digital India' programme to transform India into a digitally empowered society and knowledge economy. Today, every country including India wants to be fully digitalized. Hence, an attempt has been made in this paper to understand Digital India – as a campaign where technologies and connectivity will come together to make an impact on all aspects of governance and improve the quality of life of Indian citizens.*

*Keywords: Digital India, Digital Technology, e-Governance*

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**INTRODUCTION**

Today's computerized world that changed life of Indians from various perspectives that were difficult to imagine few years back. It is the result of several innovations and technology advances. Today, every country including India needs to be completely digitalized that will enable society to become superior one. The 'Digital India' program, an initiative of our worthy Prime Minister Mr. Narendra Modi, rises a new horizon in each sector. The vision behind the idea is to construct transparent, participative, and responsive economy. Every education institute and government organizations will provide on line nonstop service. Digital India will provide all services electronically and promote digital literacy. Digital Technologies refers to various concepts like cloud computing and mobile applications. Digital India will be responsible for economic growth and citizen empowerment. Multinational companies all over the world desire to participate in Digital India as a growth opportunity. An attempt has been made in this paper to understand Digital India. Through Digital India initiative technologies and connectivity will come together to make an impact on all aspects of governance and improve the quality of life of every Indian. Global investors like Sundar Pichai, Satya Nadella, Elon Musk have supported Modi's Digital India initiative.

**OBJECTIVES**

1. To know how the Digital India makes an impact on all aspects of governance and how it improves the quality of life of citizens.
2. To find out how the government services can work effectively with vision of a digital India.

**DATA COLLECTION**

For this paper secondary data has been collected from various magazines and journals. Data collected is conceptual data because this paper focused more about the concept, its application and the impact on economy via other parameters. Qualitative and quantitative both data have been used for this research.

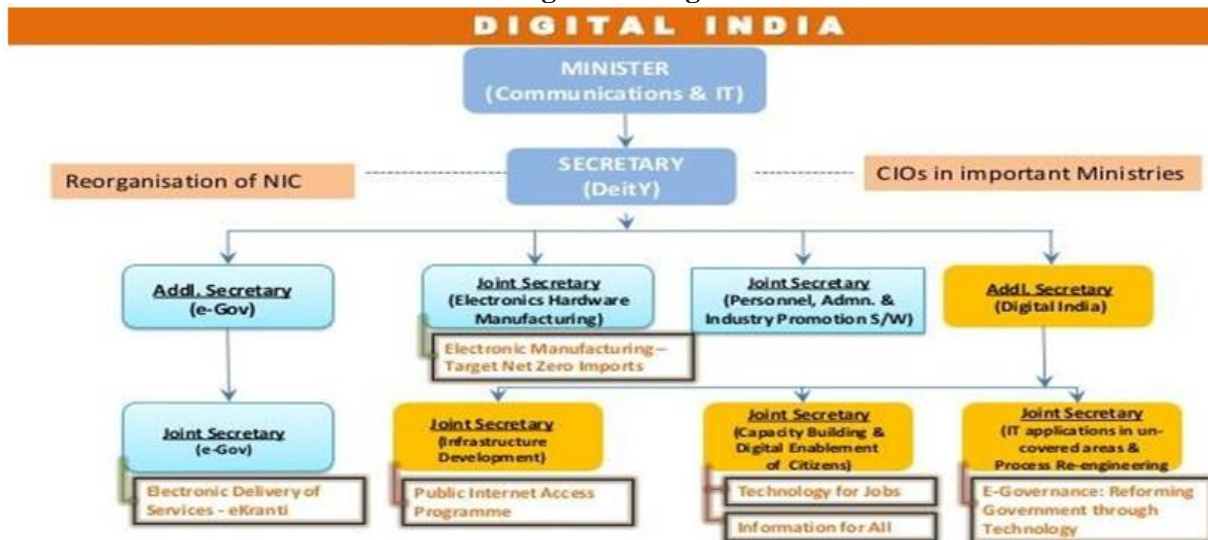
**DIGITAL INDIA**

The programme contains tasks that target to make sure that govt. services are available to people digitally and people get advantage of the newest information and connections technological innovation. Gandhiji felt that 'India resides in its villages,' and technology will help the villages to grow and prosper. Digital libraries, online magazines, e-books can be made available for free which will further help in knowledge sharing. PM Modi rightly said in his speech in San Jose, "I see technology as a means to empower and as a tool that bridges the distance between hope and opportunity. Social media is reducing social barriers. It connects people on the strength of human values, not identities." Technology is a bridge indeed, a bridge that connects the hope that India's villages will be educated and aware to the opportunity of internet and access to information from across the world. 'Digital India' is not just an initiative but a need for this country, where majority of population still does not have access to the world of internet. The Digital India initiative seeks to lay emphasis on e-governance and transform India into a digitally empowered society. It is to ensure that government services are available to citizens electronically. Digital India also aims to transform ease of doing business in the country. The Department of Electronics and Information Technology (deitY) anticipates that this program will have a huge

impact on the Ministry of Communication and IT. The program is projected at Rs 1, 13,000 crore which will prepare the country for knowledge-based transformation.

It will focus on providing high speed internet services to its citizens and make services available in real time for both online and mobile platform. Modi's government is focussing on providing broadband services in all villages of the country, tele-medicine and mobile healthcare services and making the governance more participative.

Figure-1: Digital India



**MAJOR PROJECTS UNDER THE DIGITAL INDIA**

Digital India comprises of various initiatives under the single programme each targeted to prepare India for becoming a knowledge economy and for bringing good governance to citizens through synchronized and coordinated engagement of the entire Government. Nine projects have been undertaken. These are as follows:

1. Easy access to mobile connectivity: The government is taking steps to ensure that by 2018 all villages are covered through mobile connectivity. The aim is to increase network penetration and cover gaps in all 44,000 villages.
2. E-Governance: The government aims to improve processes and delivery of services through e-Governance with UIDAI, payment gateway, EDI and mobile platforms. School certificates, voter ID cards will be provided online. This aims for a faster examination of data.
3. IT Training for Jobs: This initiative seeks to train 10 million people in towns and villages for IT sector jobs in five years. It also aims to train 0.3 million agents to run viable businesses delivering IT services. Additionally, the project involves training of 0.5 million rural IT workforce in five years and setting up of BPOs in each North-eastern state.
4. Provide public access to internet: The government aims to provide internet services to 2.5 lakh villages which comprises of one in every panchayat by March 2017 and 1.5 lakh post offices in the next two years. These post offices will become Multi-Service centres for the people.
5. E-Kranti: This service aims to deliver electronic services to people which deals with health, education, farmers, justice, security and financial inclusion.
6. Global Information: Hosting data online and engaging social media platforms for governance is the aim of the government. Information is also easily available for the citizens.
7. Highways to have broadband services: Government aims to lay national optical fibre network in all 2.5 lakh gram panchayats. Broadband for the rural will be laid by December 2016 and broadband for all urban will mandate communication infrastructure in new urban development and buildings. By March 2017, the government aims to provide nationwide information infrastructure.
1. MyGov.in is a website launched by the government for a 2-way communication between citizens and the government. People can send in their suggestions and comment on various issues raised by the government, like net neutrality.

2. **MANUFACTURING OF ELECTRONICS:** The government is focusing on zero imports of electronics. In order to achieve this, the government aims to put up smart energy meters, micro ATMs, mobile, consumer and medical electronics.
3. **EARLY HARVEST PROGRAMS:** Government plans to set up Wi-Fi facilities in all universities across the country. Email will be made the primary mode of communication. Aadhar Enabled Biometric Attendance System will be deployed in all central government offices where recording of attendance will be made online.

### **IS INDIA DIGITALLY READY**

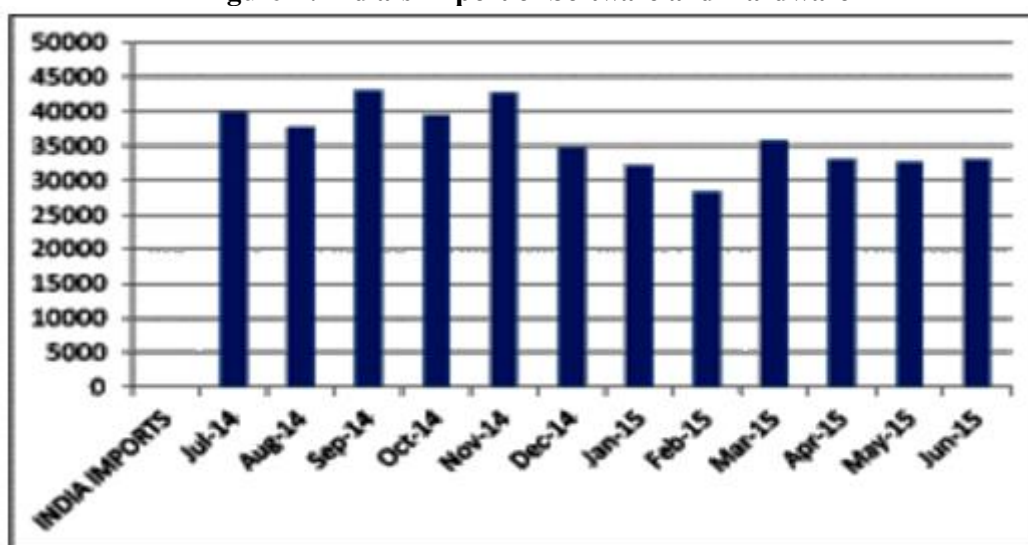
There is no doubt in it. India is ready for this. Immediately with the introduction of this campaign, many organizations came forward to lend their hands for achieving India a digitally equipped country. Organizations like TCS, Infosys, BSNL, Reliance Ltd. are coming forward to spread digitalization among rural areas. And over 42000 villages all over India will be having seamless mobile connectivity by 2018. The Internet Saathi initiative aims to cover 4,500 villages over the next 18 months, starting with Gujarat, Rajasthan and Jharkhand. India is aiming to achieve universal digital literacy across the country. The prime importance is to make sure every individual can be able to leverage the potential of Digital India. The focus is at least one person in a household should transform into an e-literate. This can be achieved by BBNL which is planning to connect 2,50,000 panchayats under the scheme. This will ensure the digitization and connectivity of local institutions like panchayats offices, schools, other government offices and libraries etc. India is reforming its government through technology in the name of E-Governance with the advancement of technology and digitalization. Under the e-governance programme, out of 252 schemes planned, 222 services have been provided in short span of time. The nine pillars of Digital India programme clearly confirms that India as a nation is at its nascent stage. One can easily assure that India will be digitally ready in the next three years.

#### **Progress in Digital India**

- More than 12,000 rural post offices linked digitally and payment banking would also start.
- The progressive policies and aggressive focus on 'Make in India' have played a significant role in the resurgence of the electronics manufacturing sector.
- The government made 'digital village' across the country, by linking all schemes with technology. The 'digital village' is powered by LED lighting, solar energy, skill development centers and e-services like e-education and e-health.
- Electronic transactions related to e-governance projects in the country have increased tremendously in 2018.
- Indian economy growing 7.3 per cent in 2015 as against 6.9 per cent in 2014.
- Gross domestic product (GDP) at factor cost at constant (2011-12) prices 2014-15 is Rs 106.4 trillion (US\$ 1.596 trillion), as against Rs 99.21 trillion (US\$ 1.488 trillion) in 2013-14, registering a growth rate of 7.3 per cent.
- The Digital India initiative creates employment opportunities for 17 million people directly or indirectly.
- Government has giving IT training to 100 million students in smaller towns and villages as employment opportunity in IT sector is very high in India.
- Today India emerged as a leader in using IT in sectors like health, defence, education, agriculture and banking.
- Service sector of India also digitally empowered.
- Digital India affected the field of education, broadband connectivity in all panchayats, schools, libraries and other public places.
- Under Digital India initiative every village is provided with universal phone connectivity across the country.
- Mobile and internet banking can improve the financial inclusion in the country and can create win-win situation for all parties in the value-chain by creating an interoperable ecosystem and revenue sharing business models.

- Telecom operators getting additional revenue and the banks can reach new customer groups incurring lowest possible costs. The digital inclusion among the country ensures the manufacturing sector to revive the electronics manufacturing.
- With the Make in India campaign and Digital India, the nation is planning to achieve net zero imports by 2020. This ensures the exports will be equal to the imports and this helps in the economic development of the country.
- With the introduction of mobile connectivity in all villages, unique single portal can be maintained for all government related services. This ensures that all databases and information should be in electronic form and not manual.
- After crude oil, Electronics **hardware** comprises major parts of imports in India. Since India is a service based country and till now we have focused only on software development, with the advent of Digital India, with its stress on making India a manufacturing hub will change the trend.

**Figure-2: India's Import of Software and Hardware**



### In Million USD

World's leading research firm McKinsey has commented that the adoption of new technologies and innovative ideas across sectors by the Digital India programme will help India boost its GDP by \$550 billion to \$1 trillion by 2025.

Thus, the impact of Digital India ranging very wide from broadband connectivity in all Panchayats, Wi-Fi in schools and universities and Public Wi-Fi hotspots. The programme will generate directly and indirectly huge number of IT, Telecom and Electronics jobs. Success of this programme will make India digitally empowered and the leader in usage of IT in delivery of services related to various domains such as health, education, agriculture, banking, etc.

The Digital India program is just the beginning of a digital revolution, in near future it will open various new opportunities for the citizens.

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## E-VOTING SYSTEM THROUGH THUMB RECOGNITION

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### ABSTRACT

In this paper a new authentication technique for online voting system using thumb recognition of the voter is used. In India, currently there are two types of voting system in practice. They are secret Ballot paper and Electronic Voting Machines (EVM), but both process has some advantages or disadvantages. In India online voting has not been yet implemented. The current voting system is not safe and secure too. The voters need to go to distributed places like polling booths and stand in a long queue to cast their vote, because of these reasons most of the people misses their chance of voting. The voter who is not eligible can also cast its vote by fake means which may leads to many problems. That's why in this paper we have proposed a system for voting which is very effective. In our approach we have three level of security in voting process. The first level is the verification of unique id number (UID), second level is the verification of election id number (EID) and third level is thumb recognition. The user authentication process of the system is improved by adding thumb recognition in an application which will identify whether the user is authenticated user or not.

Keywords: Authentication, Online Voting, Biometric Fingerprint Scanner, Online Voting System, Direct Recording Electronic

### INTRODUCTION

In India two types of method are used for voting. The first method is secret ballot paper, in which lots of paper are used and second method is EVM (electronic voting machine) which is used since 2003. We must propose a method or way for online voting that is more secure than the existing system. There are three levels of verification were used for the voters in our proposed system.

The first one is Unique id number verification, second level of verification is election commission id or voter card number, if your election commission id number is correct then you have to go for third level of security which is the main security level where the system recognize the thumb of the real voter from the current database of thumb images given by the election commission. If the captured image is matched with the respective image of the voter in the database, then a voter can cast their vote in the election as you have to know that in existing system is not much more secure because in existing system security level is only voter card so any one can give other person vote with voter card but here we proposed a way for voting which is more secure than existing system.

### REVIEW OF LITERATURE

To offer an online election system, it was necessary to study the current computerized voting system or voting machines working in different countries. Many developed countries USA, Australia have already adopted an online Election system.

### ELECTRONIC VOTING

Technology can include punched cards, optical scan voting systems and specialized voting kiosks It can also involve transmission of ballots and votes via telephones, private computer networks, or via the Internet. Electronic voting helps voters to cast votes in an election through computerized equipment. Sometimes this term is used to take votes over Internet.

### MACHINE COUNTING

Machine-readable ballot systems provides help to the voters to mark their votes on a paper card with marker and remove divots from a perforated card with a stylus or mechanical hole puncher.

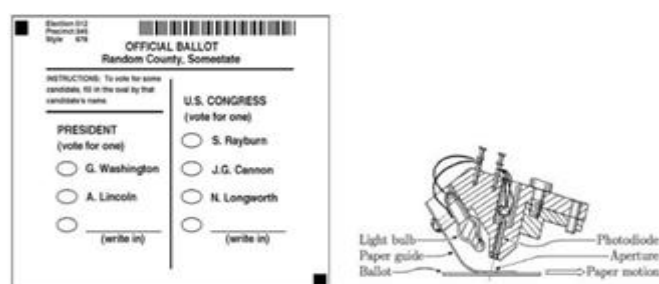


Figure: Machine readable ballot paper and counting machine

**COMPUTER VOTING**

Electronic voting machines (DRE) looking like an ATM's or personal computer used to cast votes, which provides help to vote through a keyboard, a touch screen, or a pointer to mark their votes.



Figure: Touch screen & other electronic voting machine

**ONLINE VOTING**

Online voting may be conducted in a variety of ways:

1. **POLL SITE INTERNET VOTING SYSTEMS** that require voters to go to staffed polling places and use computers to cast their votes. The internet is used to transfer the ballots from each polling place to centralized tallying centres.
2. **REGIONAL POLL SITE INTERNET VOTING SYSTEMS** that allow voters to go to any poll site in a city or region to cast their vote. The system keeps track of which voters have already cast their ballots and delivers the correct ballot paper to each voter based on where one resides.
3. **KIOSK internet voting systems** that allow voters to vote from computers in KIOSKs set up by the voting authority in convenient locations such as post offices and shopping malls. The KIOSKs are not monitored by poll workers all the time and may allow voting over a period of several days or weeks.
4. **Remote systems that allow voters** to vote from any computer connected to the internet - typically at home or at work. As well as via PCs, home internet voting could be through digital TV or even mobile phones or games machines. Remote internet voting might be used to replace poll site voting entirely, or it might be used only for absentee balloting.

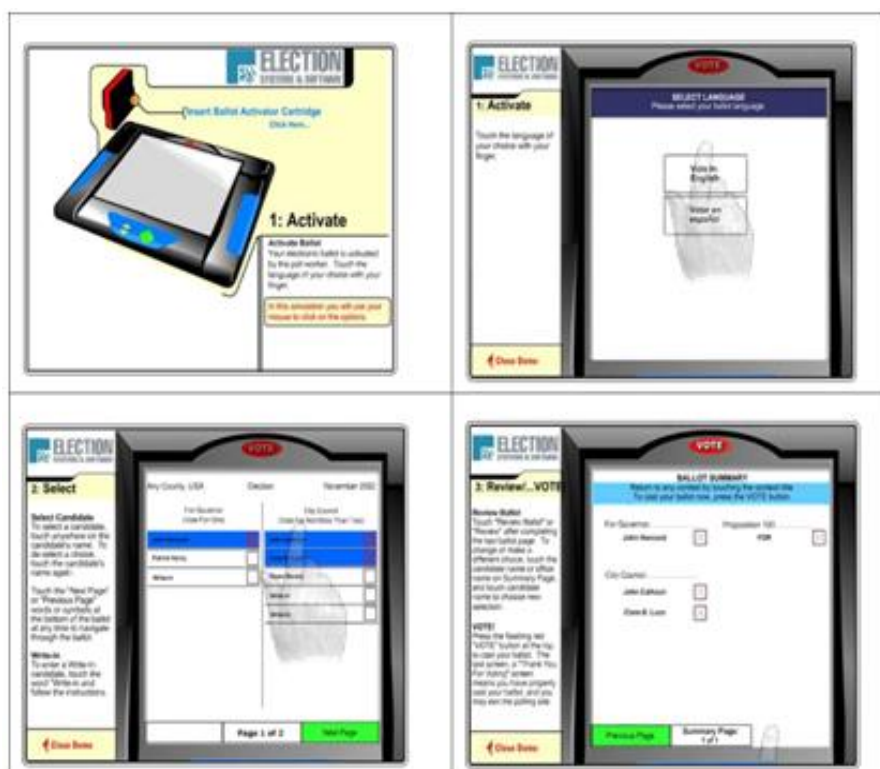


Figure: Steps to cast a vote in voting machine

## SYSTEM ANALYSIS EXISTING SYSTEMS

In the present system there are no such application level system provisions in the country to carry out the voting. Also in the present status, there is no such application in use for automated system for voting according to the voting structure existing in the country. All the step by step procedures are carried out by the authorized authorities according to the jobs assigned by the ECI. The fact is all the procedures are carried out manually, starting from the registration process to result publishing.

The government to do this process manually wastes a lot of time and money. Thus the present system proves itself to be an inefficient one. The existing system is not web based. The user or person must want to go to the polling station for casting their votes.

### Drawbacks of Existing Systems

The problems of the existing manual system of voting include among others the following:

1. **Expensive and Time consuming:** The process of collecting data and entering this data into the database takes too much time and is expensive to conduct, for example, time and money is spent in printing data capture forms, in preparing registration stations together with human resources, and there after advertising the days set for registration process including sensitizing voters on the need for registration, as well as time spent on entering this data to the database.
2. **Too much paper work:** The process involves too much paper work and paper storage which is difficult as papers become bulky with the population size.
3. **Errors during data entry:** Errors are part of all human beings; it is very unlikely for humans to be 100 percent efficient in data entry.
4. **Loss of registration forms:** Some times, registration forms get lost after being filled in with voters' details, in most cases these are difficult to follow-up and therefore many remain unregistered even though they are voting age nationals and interested in exercising their right to vote.
5. **Short time provided to view the voter register:** This is a very big problem since not all people have free time during the given short period of time to check and update the voter register. Above all, several voters end up being locked out from voting.

### Proposed System

We propose shopper server web-enabled computer code design. On the shopper facet we've a fingerprint scanner and an interface that accepts voter's aadhar range, offer the system generated distinctive range for every citizen and show confirmation standing and error messages. The interface can solely act on events from the server and feedback of citizen with none additional process. Servers are placed at remote locations from the poll booths. They are used for finishing up all the process work like image process, transferring knowledge between the shopper and therefore the information. There is central information known as Central Identities knowledge Repository that forms the backbone of the system. It contains all the demographic and biometric knowledge of each subject of Asian country. So as to cut back load on central information there are zones information are settled aboard the server technology. The target of this research paper is to gift a high-level summary of fingerprint sensing and matching technology therefore on give the reader with some insights into the strengths and limitations of the automation in matching fingerprints.

### Authentication and Verification of the Voter

Authentication is that the method of determinative whether or not somebody or one thing is, in fact United Nations agency or what it's declared to be. In order to manifest someone we tend to need them to be. In user registration module, they are planning to enter their personal details at the side of aadhar number, in our system we tend to done verification whereas user enter age, after coming into all details in user registration module, user click submit button.

Then it move to another module referred to as verification of citizen therein user once more offer their aadhar variety at the side of Arcanum with they already given in user registration module. After that user enter in to enrolment module therein system can generate distinctive 4-digits variety for every user for authentication.

In that module user offer their fingerprint four times and click on verify. Then it mechanically verified their knowledge and move to the vote module therein user offer fingerprint only once and vote the candidate (party) and make sure their vote and eventually click submit.

## MODULES

### 1. CANDIDATE DETAILS

The Candidate Details are recorded within the information that shows the actual candidate UN agency electoral for involved parties. All the quantity of candidate UN agency electoral for the priority parties are recorded.

### 2. VOTER DETAILS

The citizen details are inserted into the information that performs finger print authentication for a selected citizen and citizen id is ought to be noted for corresponding citizen. The choice of explicit citizen is finished by victimization citizen id.

### 3. FINGERPRINT ENROLLMENT

In the Enrolment Process, the fingerprint is captured with the help of the fingerprint scanner, and the captured image is enhanced with the techniques used in paper, once the image is enhanced the feature called minutiae (ending, bifurcation) are extracted with the help of the minutiae feature extraction technique and the extracted features are stored in the database for verification.

### 4. BIOMETRIC VERIFICATION

In the Verification process, the person who comes to cast a vote is registered his/her thumb impression in the controlling phase, once the image is captured it is enhanced and the feature is stored for future comparison. To check whether the voter is an authenticated voter, the input image is compared to the database. It is called authentication process. In case the print is not stored in the database, alert message will be given, so the person cannot vote or if the same person votes again, the system will display a dialogue box as —Revoting, so that the security can be alerted. If the image is found in the database then the person is allowed to vote in the balloting phase. In the balloting phase there is the number of fingerprint scanner with the symbols equalling to the number of nominees. The person allowed in the controlling phase may depict his/ her thumb impression in the corresponding scanner for whom they like to vote. Once it is captured, the identification process is carried between the controlling and balloting phase in order to identify that the person who crossed the verification process is the person who cast the vote. If there is no deadlock condition occur (i.e.) both the captured and query image is matched, then their vote is recorded for a corresponding nominee.

## ADVANTAGES

Reduced costs are enjoyed when the expenses of printing, mailing and tabulating paper ballots are lessened or even eliminated entirely from the election process.

Ability to correct mistakes allows voters to go back and correct any mistakes before final submission of their ballot. Once a ballot has been submitted however, it is final and can't be altered.

- 1. Empowerment:** Voting is the most powerful way for members to have a voice in the leadership and direction of their association. When allowed to vote in fair and open elections, members feel a greater sense of value, ownership, and responsibility. Online elections help empower members of associations, societies, and other democratic organizations by making voting easy and convenient.
- 2. Accessibility:** Online voting allows association members to access their ballots from anywhere at any time, provided they have an Internet connection. This makes casting a vote convenient and fast. Members can cast their votes from home, from work or “on the go” via their mobile devices
- 3. Fast, accurate results:** With Online voting there are no rejected, mis marked or invalid ballots. Results are automatically calculated, eliminating the need for manual tabulation and dreaded recounts. Computerized tabulation allows election managers to quickly announce decisions and results.
- 4. Appeal to younger members:** According to the Internet and American Life Project, 95 percent of Americans between the ages of 18 and 29 use the Internet. This means that Online options such as web voting might be a great way to get younger members involved in the decision-making process.

## LIMITATIONS

E-voting systems have several blessings over typical systems however it still has got to solve several hurdles before turning into coming back to fruition. India's majority population is rural and illiterate. Conjointly there's shortage of power and inadequate network between cities and villages that any adds to the issues. This technique needs smart information measure and high speed web affiliation for in operation, however it's still a far off reality in several cities in Asian country. But conditions area unit up with the onset of education in rural areas and with increasing urban population this proposed method could presently become a reality.



**CONCLUSION**

The proposed secured Online voting system with thumb recognition for authentication. Database consisting of the details like name, address, age, gender and fingerprint should be updated every time before election. This system affords additional security by allowing voter to vote only once by comparing unique identification. Our main proposal is to enable the user to cast his vote using online system without going to booth. User can cast his vote from his home or any way and to reduce the proxy vote and in booth capturing situation this system help us. Due to easy and secure voting the voting percentage also increases drastically.

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**ROLE OF AI IN IOT SECURITY****Sunita Suralkar**Assistant Professor, Computer Engineering Department, VES Institute of Technology, HMAC, Collector's Colony, Chembur

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**ABSTRACT**

*The data generated by the IoT is valuable, and such data can be analysed to understand the behaviour of individuals and their daily events. This can turn IoT devices into eavesdropping devices that capture user information including biometric data, such as voices, faces and fingerprints leading to cyberattacks. The increased demand to stop cyberattacks led to the application of AI-based techniques in IoT security. Machine Learning and Deep Learning techniques of AI could be important in predicting new attacks, which are often variations of previous attacks, because they can intelligently predict future unknown attacks by learning from existing examples. Consequently, IoT systems must have a transition from merely facilitating secure communication amongst devices to security-based intelligence enabled by DL/ML methods for effective and secure systems.*

*Keywords: Artificial Intelligence, Machine Learning, Deep learning, IoT, Security.*

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**13.INTRODUCTION**

IoT consists of a vast number of different devices that are connected with each other and transmit huge amounts of data. IoT creates big comfort for the businesses, government and peoples in their work of day-to-day life. With the advancement in the comfort, IoT come up with many serious technological challenges. Reliable and secure implementation of IoT application is most important aspect for the long time adaption of IoT. Availability of internet connected tracking devices and environment capturing sensors keep track of personal life of people at the same time it transfer it via internet to the cloud. So to assure security triangle CIA (Confidentiality, Integrity and Availability) to the people is major challenge for the researchers and developers. Recent attacks using concept of ransomware, in which attackers were seeking bitcoins to enable blocked services has created big financial damage to many people.

IoT systems are complex and contain multidisciplinary arrangements. Therefore, maintaining the security requirement with the wide-scale attack surface of the IoT system is challenging. To satisfy the desired security requirement, the solution should include holistic considerations. However, IoT devices mostly work in an unattended environment. Consequently, an intruder may physically access these devices. IoT devices are normally connected over wireless networks where an intruder might expose private information from the communication channel by eavesdropping. IoT devices cannot support complex security structures because of their limited computation and power resources. Therefore, securing the IoT system is a complex and challenging task. Given that the main objective of the IoT system is to be accessed by anyone, anywhere and anytime, attack vectors or surfaces also become accessible to attackers.

IoT technologies can enable modernisations that improve life quality and have the capability to collect, quantify and understand the surrounding environments. This situation simplifies the new communication forms among things and humans and thus enables the realisation of smart cities. IoT is one of the fastest emerging fields in the history of computing, with an estimated 50 billion devices by the end of 2020. On the one hand, IoT technologies play a crucial role in enhancing real-life smart applications, such as smart healthcare, smart homes, smart transportation and smart education. On the other hand, the crosscutting and large-scale nature of IoT systems with various components involved in the deployment of such systems have introduced new security challenges.

**IoT Security**

IoT security is the act of securing Internet of Things devices and the networks they're connected to. IoT security is a bit more challenging than traditional network security because there is a wider range of communication protocols, standards, and device capabilities, all of which pose significant issues and increased complexity. Key capabilities include traditional endpoint security features such as antivirus and antimalware as well as other features such as firewalls and intrusion prevention and detection systems. IoT devices were not built with security in mind. IoT security can only be accomplished with an integrated solution that delivers visibility, segmentation, and protection throughout the entire network infrastructure.

Many IoT devices lack basic security requirements; there is a plethora of IoT standards and protocols, which creates security blind spots; the scale and scope of IoT deployments hinder visibility into security incidents;

there is a lack of clarity of responsibility regarding privacy and security. Unlike most enterprise networks where the authentication processes involve a human being entering a credential, many IoT authentication scenarios (such as embedded sensors) are machine-to-machine based without any human intervention.

The wide range of IoT devices and hardware profiles limits the ability to have standard encryption processes and protocols. Moreover, all IoT encryption must be accompanied by equivalent full encryption key lifecycle management processes, since poor key management will reduce overall security. IoT security requires an end-to-end approach; Encryption is an absolute must.

### Artificial Intelligence

AI is a discipline in computer science that uses complex mathematical algorithms to imitate human thinking. Machine Learning is a field of AI, deep learning is a sub-field of machine learning. While machine learning is based on the idea that machines should be able to learn and adapt through experience, AI refers to a broader idea where machines can execute tasks "smartly." Artificial Intelligence applies machine learning, deep learning and other techniques to solve actual problems.

One of the problems with a huge number of IoT devices is that they don't have the processing power and storage capacity to run security solutions and store huge databases of threat and malware signatures to protect them against threats. Again, machine learning can help bring lightweight endpoint protection to IoT devices. Instead of signature-based protection (which can easily be circumvented with trivial techniques), behavior-based solutions can be developed as thin solutions that are less resource-demanding and can run without bogging down small processors.

Cybersecurity solutions that rely on AI can use existing data to handle new generations of malware and cybersecurity attacks. Palo Alto Networks introduced Magnifier, a behavioral analytics solution that uses structured and unstructured machine learning to model network behavior and improve threat detection. Additionally, Google's parent company, Alphabet, announced Chronicle, a cybersecurity intelligence platform that throws massive amounts of storage, processing power, and advanced analytics at cybersecurity data to accelerate the search and discovery of needles in a rapidly growing haystack.

### Machine Learning and Deep Learning techniques

These could be important in predicting new attacks, which are often mutations of previous attacks, because they can intelligently predict future unknown attacks by learning from existing examples. Consequently, IoT systems must have a transition from merely facilitating secure communication amongst devices to security-based intelligence enabled by DL/ML methods for effective and secure systems.

Machine learning and deep learning (ML/DL) are powerful methods of data exploration to learn about 'normal' and 'abnormal' behaviour according to how IoT components and devices interact with one another within the IoT environment. The input data of each part of the IoT system can be collected and investigated to determine normal patterns of interaction, thereby identifying malicious behaviour at early stages. Moreover, Machine Learning and Deep Learning techniques could be important in predicting new attacks, which are often mutations of previous attacks, because they can intelligently predict future unknown attacks by learning from existing examples. Consequently, IoT systems must have a transition from merely facilitating secure communication amongst devices to security-based intelligence enabled by DL/ML methods for effective and secure systems.

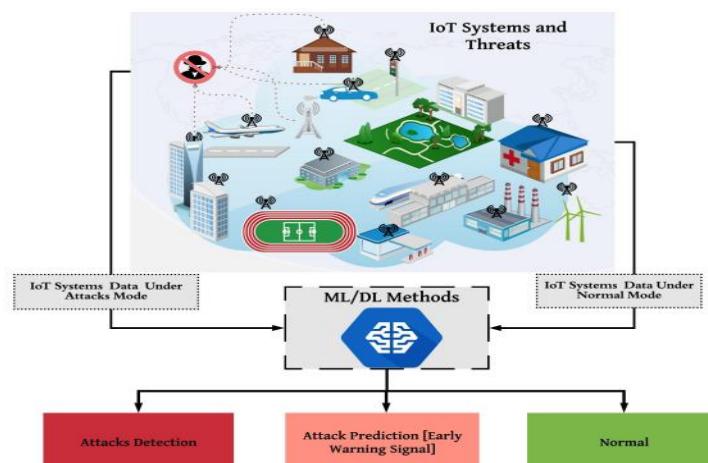


Figure-1: Illustration of Role of ML/DL in IoT Security<sup>[2]</sup>

14. MACHINE LEARNING FOR IOT SECURITY

In this subsection, we discuss the common ML algorithms (i.e. decision trees (DT), support vector machines (SVM), Bayesian algorithms, k-nearest neighbour (KNN), random forest (RF), association rule (AR) algorithms, ensemble learning, k-means clustering and principal component analysis (PCA)) applications in IoT security.

Decision trees, Bayesian algorithms, KNN can be used for detection of Intrusion and suspicious traffic sources. SVM can be used for detection of Intrusion, malware and attacks.

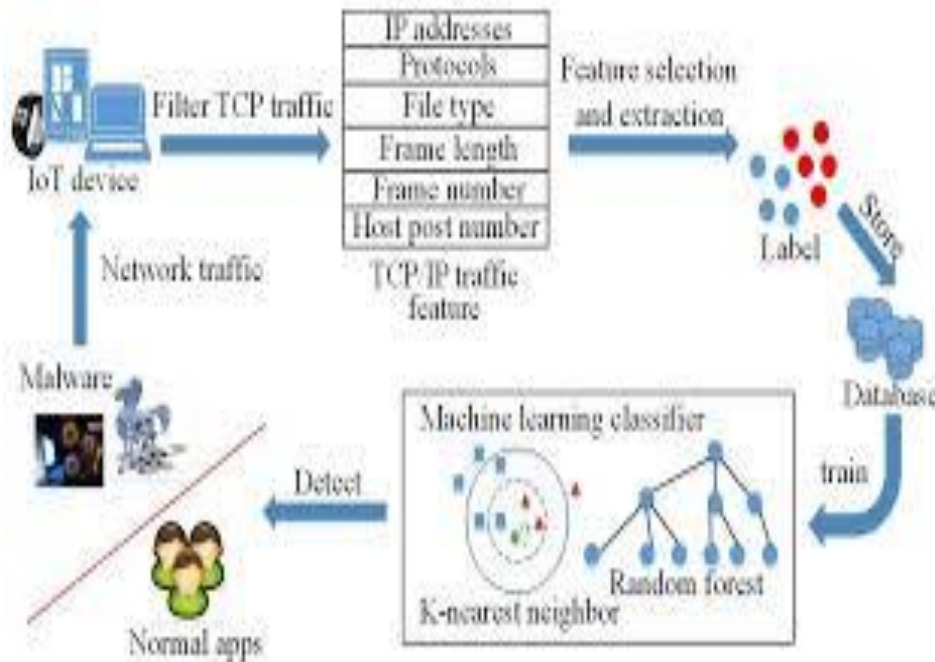


Figure-2: Machine Learning for Malware Detection<sup>[4]</sup>

15. DEEP LEARNING FOR IOT SECURITY

The most vital advantage of DL is large datasets. Several IoT systems produce a large amount of data; thus, DL methods are suitable for such systems. Moreover, DL can automatically extract complex representations from data. DL methods provide a computational architecture that combines several processing levels (layers) to learn data representations with several levels of abstraction. DL methods are also known as hierarchical learning methods because they can capture hierarchical representations in deep architecture. The working principle of DL is inspired by the working mechanisms of the human brain and neurons for processing signals. Deep networks are constructed for supervised learning (discriminative), unsupervised learning (generative learning) and the combination of these learning types, which is called hybrid DL.

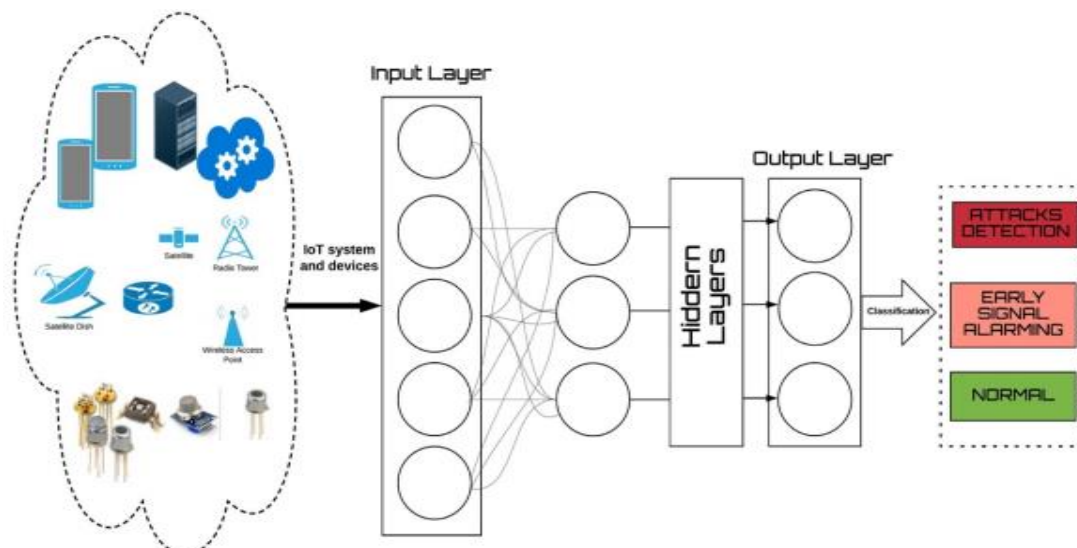


Figure-3: DL Neural Networks working principle for IoT Security.

CNNs and recurrent neural networks (RNNs) are examples of discriminative DL methods. Deep autoencoders (AEs), deep belief networks (DBN), restricted Boltzmann machines (RBMs), generative adversarial networks (GANs) and ensemble of DL networks (EDLNs) are examples of hybrid DL methods.

CNNs can automatically learn features of raw security data; therefore, they can construct an end-to-end security model for IoT systems. RNNs can classify network traffic with high accuracy in detecting malicious behaviour. AEs can be used for detecting malware. RBMs can be used for network anomaly detection. DBNs can be used for malicious attack detection. GANs can be used to build an architecture for securing the cyberspace of IoT systems.

## **16. APPLICATIONS**

IoT has several applications. The commonly known applications include smart healthcare, smart transportation, smart grid and smart building.

### **1) Smart healthcare**

IoT devices have become popular in health applications in recent years. The IoT system is rapidly becoming a key instrument in healthcare. IoT devices are used in healthcare sectors to closely observe and record patient conditions and send warnings to the concerned healthcare system in critical circumstances to provide a rapid and timely treatment to patients. The IoT in healthcare systems must be secured whilst providing flexible access to devices to save lives in emergency cases.

IoT sensors are widely used to monitor daily health-related activities. A smartphone is usually employed to monitor health-related activities, such as daily activity (number of steps, walking and running distance and cycling distance), and sleep analysis. IoT has prodigious opportunities to potentially advance healthcare systems and a wide range of applications

### **2) Smart transportation**

Smart or intelligent transport systems have become attainable with the help of IoT systems. The main objective of smart transport is to manage daily traffic in cities intelligently by analysing data from well-connected sensors located in different places and implementing data fusion (data from CCTV, mobile devices, GPS, accelerometers, gyroscope-based applications and weather sensors). The data are then explored and integrated to provide smart choices to users. Moreover, the data analytics of smart transport can implicitly enhance shipment schedules, advance road safety and improve delivery time.

### **3) Smart governance**

IoT can facilitate smart governance. Integrating data from different governmental sectors can provide authorities with abundant information from a wide range of sensor data (from weather-related data to security-related data). The huge amount of data generated by IoT sensors can overcome the limitations of conventional monitoring systems in an exceptional manner, thereby presenting a knowledge-based system from information fusion sources that compiles and correlates data from different sectors to deliver an optimal decision considering multiple perspectives.

### **4) Smart agriculture**

IoT systems can be applied to improve the agriculture sector. IoT sensors can be implemented to enable real-time monitoring of the agriculture sector. IoT sensors can collect useful data on humidity level, temperature level, weather conditions and moisture level. The collected data can then be analysed to provide important real-time mechanisms, such as automatic irrigation, water quality monitoring, soil constituent monitoring and disease and pest monitoring.

### **5) Smart grid**

The latest development in power grids was achieved by using the IoT platform to construct a smart grid in which the electricity between suppliers and consumers is handled smartly to improve efficiency, safety and real-time monitoring. The IoT platform plays a significant role in effective grid management. Applying IoT technology in a smart grid can help prevent disasters, decrease power transmission to enhance the reliability of power transmission and minimise economic losses. Moreover, analysing the data generated by IoT sensors can help decision makers select a suitable electricity supply level to deliver to customers.

### **6) Smart homes**

IoT components are used to realise smart homes. Home IoT-based machines and systems (e.g. fridge, TV, doors, air conditioner, heating systems and so on) are now easy to observe and control remotely. A smart home system can understand and respond to surrounding changes, such as automatically switching on air conditioners based on weather predictions and opening the door based on face recognition. Intelligent homes should

consistently collaborate with their internal and external environments. The internal environment involves all home IoT devices that are managed internally, and the external environment involves objects that are not managed by the smart home but play important roles in the construction of the smart home, such as smart grids.

From the above discussions of the IoT system, we can conclude that the nature of IoT systems can increase security risks because of the following reasons:

- By nature, the IoT is a multipart model with various applications with diverse requirements. This nature demonstrates the huge complexity of such systems through extensive IoT applications, from smart home, smart car to smart healthcare. Such drivers and various IoT applications can be a challenge whilst developing an effective security scheme, in which, the effective security method proposed for a specific application or requirement may be unsuitable for other applications with different requirements.
- IoT systems are vastly heterogeneous in protocols, platforms and devices that are accessible worldwide. Such features of IoT systems become bottlenecks that prevent the development of effective and generalised security schemes for such systems.
- IoT devices can be designed to independently adapt to the adjoining environment. Consequently, IoT devices can be controlled by other devices. For such cases, an effective IoT security must not only be proposed to secure each device independently but also to provide an end-to-end security solution.
- The data generated by the IoT is valuable, and such data can be analysed to understand the behaviour of individuals and their daily events. This can turn IoT devices into eavesdropping devices that capture user information including biometric data, such as voices, faces and fingerprints that can aid in IoT device intrusion.
- Physical attacks can increase by implementing IoT systems because most of the physical things of IoT (e.g. sensors) may be ubiquitously and physically reachable. Physical threats may also be caused by unintended damage from natural disasters, such as floods or earthquakes, or disasters caused by humans, such as wars. Therefore, an effective security solution must be context-aware by considering such characteristics of IoT systems.
- IoT systems do not have exact boundaries and are constantly adjusted whilst new devices are added or due to user mobility. Such characteristics allow the IoT model to continually expand attack surfaces and introduce several vulnerabilities.

## 17. CONCLUSION

The requirements for securing IoT devices have become complex because several technologies, from physical devices and wireless transmission to mobile and cloud architectures, need to be secured and combined with other technologies. The advancement in ML and DL has allowed for the development of various powerful analytical methods that can be used to enhance IoT security.

Methods that can broadly understand and gain knowledge on the behaviour of things and other IoT components within such large systems are required. However, Machine Learning and Deep Learning techniques can predict the expected behaviour of a system by learning from previous experiences. Therefore, applying Machine Learning and Deep Learning techniques can significantly advance the security methods by transforming the security of IoT systems from simply facilitating secure communication between devices to security-based intelligence systems.

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## A STUDY OF LINKAGE BETWEEN DATA MINING, MACHINE LEARNING, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

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### ABSTRACT

*In this paper Data Mining, Machine learning, Artificial Intelligence and Data Science methodologies are explained with all their respective techniques. These techniques systematically segregates large datasets, categorized them based on common traits, predict future events with relevant action and also triggers the actions based on actual events occurred. These four methodologies work independently on defined data sets and provide required inputs to next process. This paper also discusses linkage between these four processes for complete implementation of an Artificial Intelligence based application.*

*Keyword: Data Mining, Machine learning, Artificial Intelligence, Data Science*

### 1. INTRODUCTION

In this paper Data Mining, Machine learning, Artificial Intelligence and Data Science techniques are explained. Data mining handles huge and complex database to classify required information to arrange data sets into logical groups. In Machine learning the machine automatically study the factors of models from the given data. It uses self-learning algorithms to improve its outcome with experience over the period. Artificial Intelligence is used to provide answers to the existing problem with the help of data generated by the mining algorithms. Data Science is the most effective technique to identify outliers.

### 2. DATA MINING

Data Mining is used to extract vital information from the dataset. Different data mining algorithms are used to highlight patterns from existing information. This vital information retrieved from data mining algorithms serves as foundation for AI and machine learning. Data mining is more than gathering supersets of facts from different sources. Data mining first retrieve the important information and then aggregate the retrieved information to form a patterns and correlations between data. The designed patterns and correlated data mined data can be used by artificial intelligence and machine learning as the basis. The objective of data mining is to search hidden patterns and relations between two or more data variables from the dataset to generate a commercial value. This data information can be used to predict the results and to summarise the data. There are various data sorting methods which can be used to complete this mining objective such as clustering, classification and sequence analysis. Batched information is used by mining methods to retrieve a new perception for a specific time rather than continuing basis.

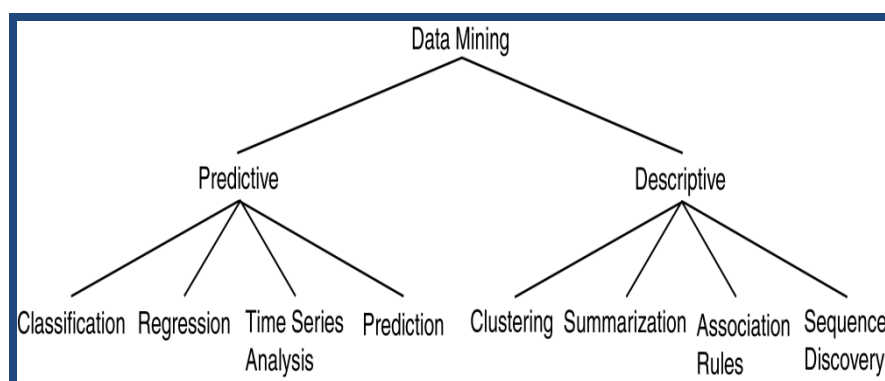


Figure-1: Data mining techniques: <sup>[1]</sup>

#### 2.1 Data Mining Techniques

Following are the two types of Data Mining Techniques:

**a. PREDICTIVE MODEL** Predictive model is based on historic data. This model analyses past data and accordingly predicts future events.

- **Classification:** Classification is a classic data mining technique based on machine learning. Basically, classification is used to classify each item in a set of data into one of a predefined set of classes or groups. <sup>[2]</sup> It uses supervised learning.
- **Regression:** This process is used to map a data item to a real valued prediction variable.

- **Time Series Analysis:** Time Series Analysis examines value of an attributes which varies over a period of time. This analysis inspects the changes in an attribute with periodic intervals.
  - **Prediction:** This process predicts future state of a variable based on systematic analysis of series of events.
- b. DESCRIPTIVE MODEL:** Descriptive Model identifies patterns or relationships in data. This model is very useful to explore the properties of data.
- **CLUSTERING:** In this process data with similar or matching characteristics are grouped together to form clusters. This is a useful classification technique using large data. K-means is signal processing originated method of vector quantization, which is a famous method for cluster analysis in data mining. <sup>[3]</sup>
  - **SUMMARIZATION:** This process creates subsets of data with associated simple descriptions. This process uses generalization.
  - **Association Rules or Link Analysis:** This process examines data to establish relationships among data.
  - **Sequence Discovery:** This process identifies data sequence patters based on a series of data.

### 3. MACHINE LEARNING

Machine Learning use the process one step ahead than Artificial Intelligence by contributing the information for a machine to learn and adapt for exposing to new dataset. In Machine learning we give the complete information to the machine to train it completely to handle a new situation. It first read the data mined data, and then use a new algorithm created by AI to update current algorithms with the help of learned new task. Machine learning and data mining both use the same algorithms to learn relationships in the data. Machine learning is branch of manmade brainpower science (artificial intelligence) i.e. the frameworks that can learn information. <sup>[4]</sup>

#### 3.1 Machine Learning techniques

Following are the four types of Machine Learning techniques

- a. Supervised Machine Learning Algorithms:** Supervised Machine learning algorithms are built to analyse known types of data and make predictions on given set of samples. This technique typically builds predictive models based on known data sets and its relevant predictions. This algorithm looks for patterns within the value labels associated to data points.
- b. Unsupervised Machine Learning Algorithms:** Unsupervised Machine Learning Algorithm is used for unstructured and complex data which doesn't have data labels. These machine learning algorithms systematically categorises data into a group of clusters to define its structure. By using clustering techniques any complex data structure can be examined quickly.
- c. SemiSupervised Machine Learning Algorithms:** This methodology is typically a combination of supervised and unsupervised learning. This technique used to standardize the data which contains large unlabelled data along with small labelled data. This technique stabilise the complex data to a large extent using both supervised and unsupervised techniques.
- d. Reinforcement Machine Learning Algorithms:** Reinforcement Machine Learning Algorithms is self-evolving techniques which change strategies based on past actions and related results. These algorithms choose actions based on available data point and then analyses the decision was. Learning from past actions and decisions are used to improve strategy and attain better results.

### 4. ARTIFICIAL INTELLIGENCE

AI is a way to make machines think and behave intelligently. These machines are controlled by software inside them, so AI has a lot to do with intelligent software programs that control these machines. It is a science of finding theories and methodologies that can help machines understand the world and accordingly react to situations in the same way that humans do. <sup>[5]</sup>

Data mining, artificial intelligence and machine learning are so interconnected that it is actually very hard to form a hierarchy between these three. Actually they are involved in interdependent relation so that a mixture of their methods can be used to design precise outcomes. Data mining is always used as an essential measure for coding programs with the information and statistics required by AI to generate a solution.

#### 4.1 Common types of Artificial Intelligence Techniques

- a. Case-based reasoning:** Case-based reasoning (CBR) solves a problem by recalling similar past problems assumed to have similar solutions. Numerous past cases are needed to adapt their solutions or methods to the new problem. CBR recognises that problems are easier to solve by repeated attempts, accruing learning. <sup>[6]</sup>



**b. Rule-based expert system:** This technique is the simplest form of AI. It has predefined rules and techniques. Each rule has an IF conditional statement, as the IF criteria matches, actions related to respective condition is executed.

**c. Artificial neural networks:** It is based on the working of human brain by making the right connections at given condition. Artificial neural networks consist of multiple **nodes as biological neurons** of human brain. The nodes are connected by links to interact with each other. Every link is having some weight. By changing the link weight ANN can accomplish learning. The nodes can perform simple operations on the input data and can share results to other neurons. The result of node is known as **activation or node value**. Neural network is another emerging technique used in Educational data mining. <sup>[7]</sup> ANN learning can be either supervised or unsupervised. <sup>[8]</sup>

**d. Genetic algorithms:** It is based on evolutionary biology techniques such as selection, mutation, inheritance and recombination. Genetic algorithms are used for searching through large and complex data sets for finding optimized solutions. They give solution for search problems based on the theory of natural selection and evolutionary biology.

**e. Fuzzy systems:** It is one of the reasoning methods based of human reasoning system. It includes all the values between zero and one where zero represents false and one represent true. In fuzzy system the logic cannot give only absolute truth and absolute false value. But intermediate values are also possible which is partially true and partially false.

**f. Multi-agent systems:** It is system which allows independent processes to coordinate with each other. In this system the problem knowledge is divided into the necessary subunits. Then the independent intelligent agents coordinate the agent activities. It supports the feature of distributed artificial intelligence.

**g. Reinforcement learning:** Reinforcement learning is often used for robotics, gaming and navigation. With reinforcement learning, the algorithm discovers through trial and error which actions yield the greatest rewards. <sup>[9]</sup>

## 5. DATA SCIENCE

Data science involves Machine learning as well as statistics methods to analyse data for making future prediction. It is a practical application of machine learning with an objective of solving real world problems. It is an interdisciplinary area with processes and systems to search knowledge from dataset in various formats. It helps AI to provide solutions to problems by associating similar data for prospect use. Data science is the application of quantitative and qualitative methods to solve relevant problems and predict out-comes. <sup>[10]</sup>

### 5.1 Common types of data science techniques:

**a. Anomaly Detection:** Anomaly Detection searches for information in a set of data, which does not match expected behaviour or predicted usual pattern. Anomalies are also termed as exceptions, contaminants, outliers or surprises and they usually denote actionable important information. These objects could considerably deviate from the usual average of a dataset. Anomaly detection data which does not fits in the data set and shows considerable deviation which suggest that there are unknown facts in the data which needs more attention.

**b. Clustering Analysis:** Clustering Analysis classifies data sets with same characteristics and studies their similarities along with the differences with other data sets. It forms cluster of similar data based on their attributes. Each cluster has common traits which can be further used to improve algorithm. As an example we can observe customers buying same type of products or buying on similar dates of the month. This can boost the promotion techniques to focus on these clusters for specific products or specific shopping period.

**c. Association Analysis:** Association Analysis discovers relevant associations between different variables in a large database. This technique helps to ascertain patters in the given data which can detect variables in the data and establish connections between various variables. This technique is typically used in retail stores to look for buying patterns of the customers and accordingly outlet can send recommendation of similar products the customer has bought earlier or recommend supplementary product for the items customer has already bought. This technique is very useful to analyse large data and find similar patterns occurring in regular intervals.

**d. Regression Analysis:** Regression Analysis determines dependency between attributes. It is assumed that one attribute has a single way casual effect in response to another attributes. Two attributes can be related to each other by one way effect which forms dependency. Independent attributes can affect each other, but this doesn't necessarily denote that both are dependent on each other. There is always a possibility that one attributed is dependent on other but not the same way around. Regression analysis determines this one way effect between the attributes and find out which variable is dependent on another.

**e. Classification Analysis:** Classification Analysis systematically segregates large data to classify it into different categories. This technique is helpful to identify different types of data present in the data set and among those which are significant data categories which needs further analysis. Classification analysis is normally implemented with cluster analysis as classifying data is usually the pre-requisite for clustering. Email classification can be a good example of these techniques. Using keywords or sender information mails can be classified as internal, classified or spam. By categorising these mails user can easily focus on important mails first to improve efficiency and effectively manage inbox.

## 6. Linkage between Data Mining, Machine learning, Artificial Intelligence and Data Science methodologies

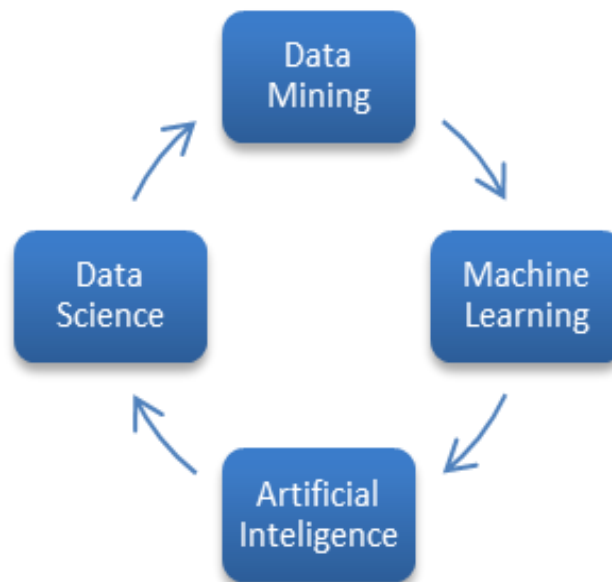


Figure-2: Linkage between Data Mining, Machine learning, Artificial Intelligence and Data Science

Data mining is a technique of collecting historic data and segregating it into different clusters based on its characteristics. Data mining also ascertain patterns in large data sets based on occurrences and frequencies. Data mining is an effective technique of data classification and to present complex data into a systematic database with data labels.

Machine learning is used to predict future events based on historic data patterns. It uses existing data sets to perform analysis to form rules and actions for future events. Machine learning uses supervised, unsupervised learning algorithms to interpret data by applying predefined rules. It also evolves based on learning from past actions and its respective results. Using Reinforcement Machine Learning algorithms, strategies and actions can be improved to optimize the performance.

Artificial Intelligence is a broader concept also involving actions based on data segregations and predictions. It can be considered as a self-sufficient independent authority to execute or recommend certain course of actions based on the scenario. Robotics, BOTs are some of the systems based on AI.

Data Science on the other side critically examines complete scenario and actions to understand the dynamics of the overall transaction. It evaluates the results and gain insight on further improving the process. Using multiple analytical techniques Data Science shows common attributes which are not yet defined or related attributes which has one way impact on another. It is very important for every process to identify exceptions and outliers which are not in usual average. Outliers are identified with the help of Data Science techniques. These are indications of certain anomaly which needs more attention.

## 7. CONCLUSION

Data mining, Machine learning, Artificial Intelligence and Data Science methodologies have their independent features, while building a system, all these techniques go hand in hand. All these methodologies are interrelated as well as dependent on each other to perform their respective tasks. We can tie these four techniques with common thread of data. Data produced by Data Mining is used by Machine Learning to predict future event and relevant rules. Artificial Intelligence executes the action based on Machine Learning rules and understanding. Once the operation is completed related actions and results are studied using Data Science techniques to

optimise and improve the performance. Data Science covers Artificial Intelligence techniques, which contains machine learning techniques. Machine learning contains deep learning which is based on data mining data.

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**GENERATE AS SECURE HYPERLEDGER TRANSACTION USING BLOCKCHAIN TECHNOLOGY**

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**ABSTRACT**

*Blockchain technology provides freshness properties as each block is associated with its timestamp and the previous block. Due to these properties, the Blockchain Technology is being used as a decentralized, banked-upon, and safe service. In this paper, we present a practical insight into successfully creating a Hyperledger transaction and highlight how secure this technology can prove to be.*

*A blockchain, is a growing list of records, called blocks, which are linked using cryptographic methods. Each block contains a cryptographic hash of the previous block, a timestamp and transaction data. Hyperledger is an inter-industry supported effort from the Linux Foundation to support blockchain-based distributed ledgers, with projects under this program including Hyperledger Burrow and Hyperledger Fabric spearheaded by giants like IBM.*

*This abstract is focused on showing how to practically build a transaction using Hyperledger Composer. Hyperledger Composer is a tool to help create blockchain networks by simple methods. This will explain the terminologies and concepts of Composer and use the Online Playground in the web browser with an example to make a demo transaction. Playground is an open blockchain platform.*

*Hence this paper can convince users and developers to some extent establish that the block chain technology will play a vital role in all the business transaction particularly in the financial sectors like banking, investment, accounting and auditing, and any transaction based systems which will be secure.*

*Keywords: Blockchain, Block, Hyperledger, Hyperledger transaction, Composer Playground.*

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**1. INTRODUCTION**

Blockchain is a public digital ledger which is distributed and used to record transactions over many computers so that any involved record cannot be manipulated retroactively without the changing of all subsequent blocks. It is a distributed database that is residing on multiple computers simultaneously. It is constantly growing, as new sets of recordings or 'blocks', are added to it frequently. Each block contains a timestamp and a link to the previous block, so they actually form a chain. Blockchain is network of computers that together manage the database that records transactions.[1] The database is not managed by a sole centralised authority. Decentralization means that the network operates on a peer-to-peer basis. Blockchain is an environment with a scripting language that can solve many use cases other than just cryptocurrencies.

**Blockchain Technologies / Frameworks**

- Hyperledger; This Supported by Linux Foundation & IBM.
- Multichain; it is an open platform for building blockchains.
- R3 Corda; this is a blockchain framework developed for BFSI industry.
- Open blockchain; an open blockchain fabric code framework.
- Ethereum; It is a private blockchain framework from Ethereum.
- Eris Industries; a low cost blockchain implementation framework.

**2. BLOCKCHAIN NETWORK**

A blockchain network is an infrastructure that provides smart contract (chain code) and ledger services to applications. Basically, smart contracts are used to generate transactions which are further distributed to every peer node in the network where they are immutably recorded on their copy of the ledger. Client Applications or block chain network administrator users may be the users of applications.

Mostly, multiple organizations come together as a group to form the network and their permissions are determined by a set of policies that are agreed by the group when the network is initially configured. Further, network policies can change over time subject to the agreement of the organizations in the consortium, as we'll discover when we discuss the concept of modification policy. [2]

### 3. HYPERLEDGER BUSINESS NETWORK ARCHITECTURE

Hyperledger is an open source blockchain project started in December 2015 by the Linux Foundation and supported by big industry players like IBM, Intel and SAP to support the collaborative development of blockchain-based distributed ledgers. Hyperledger incubates and promotes a range of business blockchain technologies, including distributed ledger frameworks, smart contract engines, client libraries, graphical interfaces, utility libraries and sample applications. [3]

Hyperledger composer playground is a tool to help easily create block chain business networks. This tool is browser-based interface which is useful for build and test the block chain business network transaction without installation using cloud environment. The best way to think about it is: you want to make your own custom blockchain, but it's simple enough that you just need to define who is going to be using the blockchain and what they're going to be trading/creating, then Composer will let you define those people/items and you can have your blockchain ready with minimal code. Let us describe the architecture of composer tool, Business Network Archive file (.bna) is package which is needed for creating or deploying the business network. In other words **.bna** is a folder which consist of four file **.cto**, **.js**, **.acl** and **.qry** file. CTO is a model language used in the composer it holds the namespace for business network. Next is **.js** file i.e. JavaScript explains the transaction function used in the business network. Access control rules of various user i.e. called participant in the network are defined in the **.acl** file. Bespoke language is used for writing query in **.qry** file and it follows CouchDB Mango query language standards. [4]

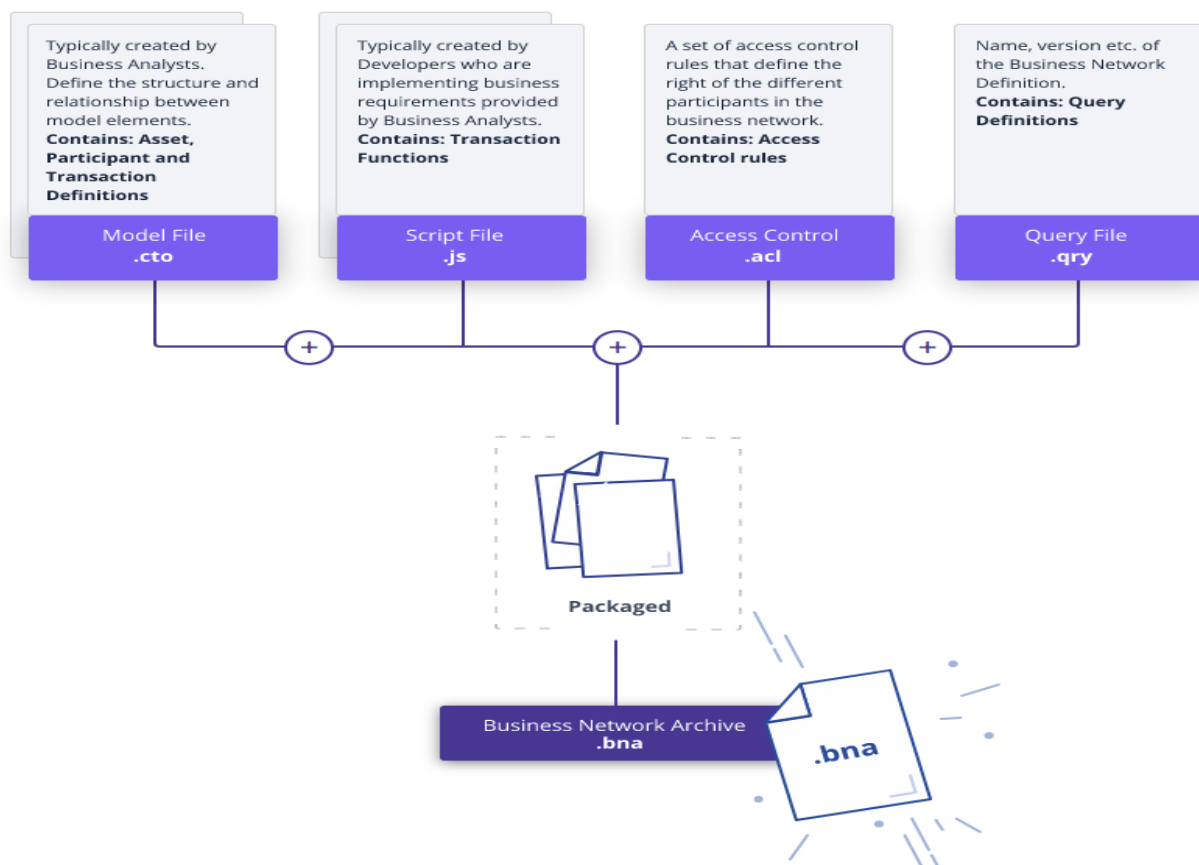


Figure-1: Hyperledger Composer Architecture

### 4. IMPLEMENTATION OF CREATING NEW BUSINESS NETWORK

Our business network transaction deployed for student course registration. During course registration, each course has two boundaries one is minimum number of seat and maximum number of seat for a particular subject. During time table registration, student only knows the minimum number of seat. As a case by case requirement, based on critical case and pre-requisite course criteria some seat will be added to particular course. Critical case means for example “graphics” is the last course remaining in a particular level for the student to complete the level. Suppose “graphics” is Pre-requisite course for some course the student will take next semester, then it is mandatory for the student to complete that course in the current semester. In this case, based on the advisor’s request the seat will be increased for the particular course (in this case graphics). Then these students with special request will register to the course. The name of the business network file (**.bna**) file is course-registration. The namespace is “com.course.registration”.

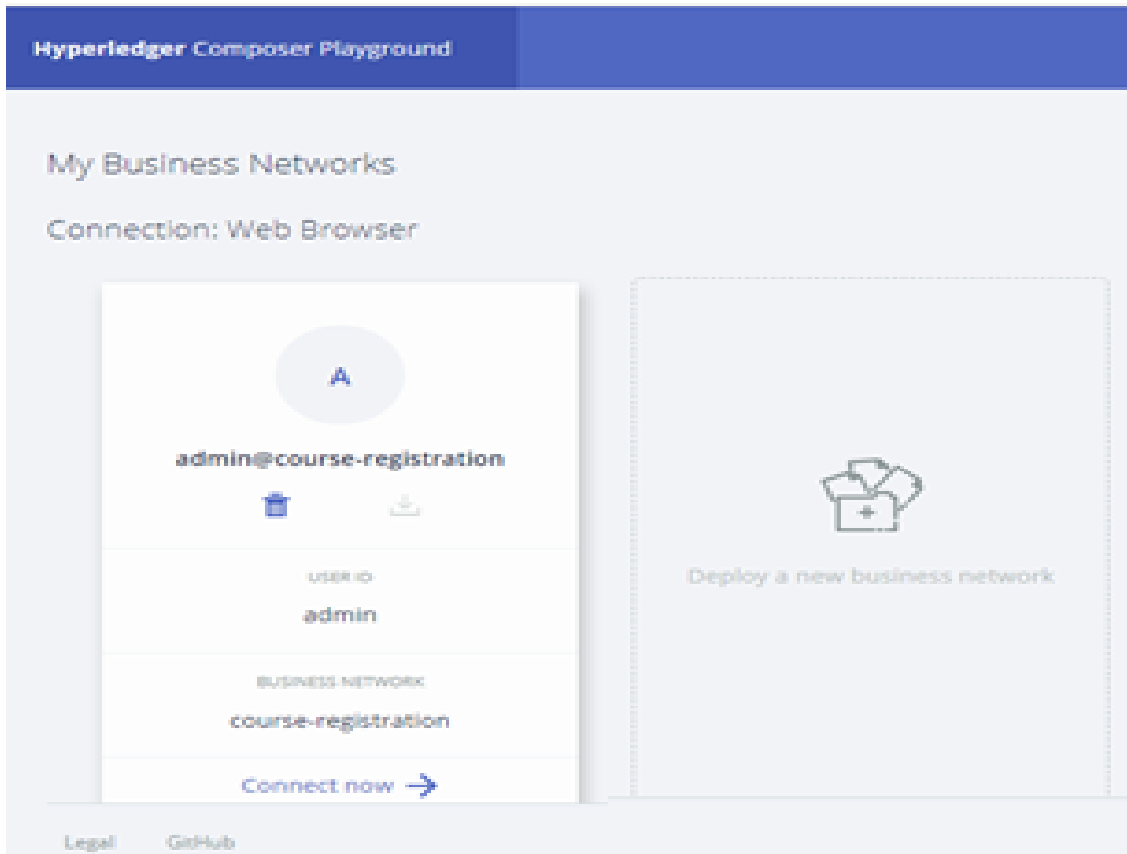


Figure-2: Create new Business network “course-registration”

In Figure 3, model .cto file Participant, Asset and Transaction resources are declared. All these resources are implicitly part of the single name “com.course.registration”

Participant is user or actor or individual of the organization. In technical terms participant is identity. Advisor participant is created to interact with business network transaction. For accessing business network the access control privilege grant should be issued and once identity document expires after a certain period of time, the participant access should be revoked from interacting with business network.

Asset is a collection of key values used in the transaction, “courseAsset” is the name of the Asset. courseId and quantity are key values in the courseAsset.

Each Transaction is stored in the hyper ledger registry. Transaction function name is “AddCourse”. While runtime transaction function is automatically invoked. Transaction function structure is available in the .js file.

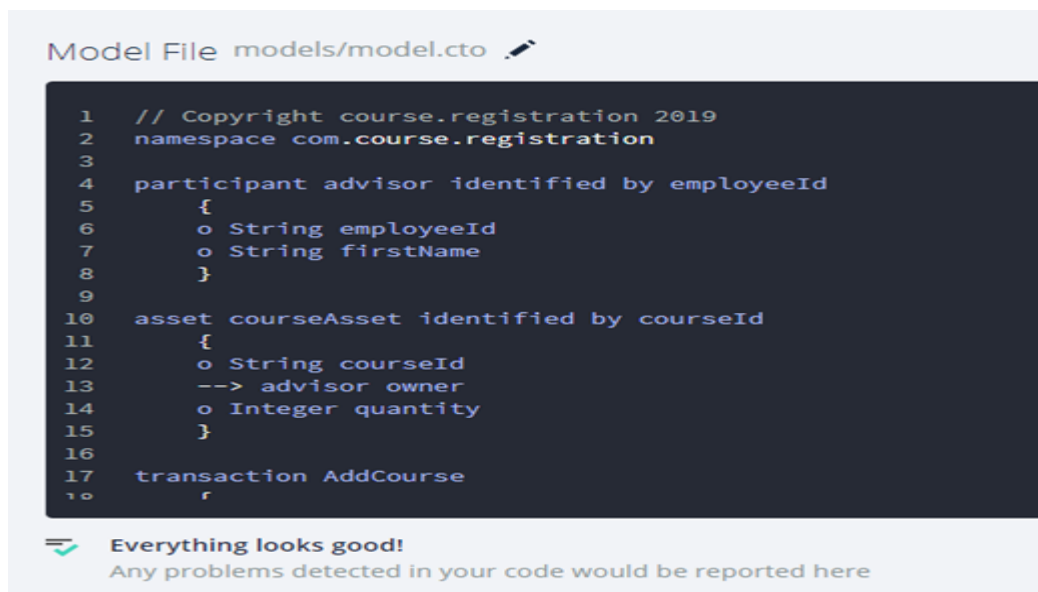


Figure-3: Model file

In the .js file, tx is parameter of AddCourse transaction function. In the transaction first save the already existing course seat count. The courseId is graphics and quantity is 10. (i.e number of seat).



Figure-4: Create New Asset

Before adding the asset information, the participant information to be created in the third line it is given "owner": "resource: com.course.registration.advisor#101". The 101 is employeeId of the participant "rachana".



Figure-5: Create New Participant

Next step is to update the seat quantity from 10 to 15. Now seat quantity is increased and that transaction is submitted.



Figure-6: Update the Asset value

These two transaction detail function codes are written in the given below .js file.

```
Script File lib/script0.js
11
12 // Update the asset to what the new value is.
13 tx.courses.quantity = tx.newCourseCount;
14
15 // Get the asset registry for the asset.
16 const assetRegistry = await getAssetRegistry('com.course.registration.courseAsset');
17 // Update the asset in the asset registry.
18 await assetRegistry.update(tx.courses);
19
20 // Emit an event for the modified asset.
21 let event = getFactory().newEvent('com.course.registration', 'MadeFreshCourseEvent');
22 event.courses = tx.courses;
23 event.howManyBefore = oldCourseCount;
24 event.howManyNow = tx.newCourseCount;
25 emit(event);
26 }
27
28
```

Everything looks good!  
Any problems detected in your code would be reported here

Figure-7: JavaScript file

The history of the above transaction is stored in the hyper ledger registry.

```
Historian Record
Transaction Events (1)
1 |{
2 |  "$class": "com.course.registration.AddCourse",
3 |  "courses":
4 |    "resource:com.course.registration.courseAsset#graphics",
5 |    "newCourseCount": 15,
6 |    "transactionId": "5110cf5f-58bd-4063-a756-773b16fcd059",
7 |    "timestamp": "2019-01-25T01:19:09.789Z"
8 | }
```

Figure-8: Transaction details

In the same manner, it is possible to include another participant and asset information in the transaction.

Participant registry for com.course.registration.advisor + Create New Participant

ID	Data
101	{ "\$class": "com.course.registration.advisor", "employeeId": "101", "firstName": "rachana" }
102	{ "\$class": "com.course.registration.advisor", "employeeId": "102", "firstName": "giriya" }

Figure-9: Adding one more participant



Now both the course transaction and updated seat is available in the business network

Asset registry for com.course.registration.courseAsset

ID	Data
graphics	<pre>{   "\$class": "com.course.registration.courseAsset",   "courseId": "graphics",   "owner": "resource:com.course.registration.advisor#101",   "quantity": 15 }</pre>
sql	<pre>{   "\$class": "com.course.registration.courseAsset",   "courseId": "sql",   "owner": "resource:com.course.registration.advisor#101",   "quantity": 12 }</pre>

Submit Transaction Successful  
Transaction ID  
6cfe80ae-96f0-4e08-a0c7-5bdf2f09064 was submitted

Figure-10: Adding and updated one more Asset “SQL”

## 5. CONCLUSION

In this paper we presented how to practically build a transaction using Hyperledger Composer. Every successful transaction submitted comes with a hashed transaction id. Two transactions were made, as a sample to increase the number of seats 10 to 15 in the course Computer graphics, and both the transactions are recorded by separate transaction id's. This is the basic essence of blockchain technology and the security perspective that was tried to bring out in this paper. Every participant added is recorded in the participant registry. The most important aspect to be noted is that these transactions with distinct id's and the participant registry can be changed/edited, which ensures the transactions to be secure. The transactions are not only secure but also accountable. Every user who submits transactions and eventually blocks are accountable for every transaction. Every edit is recorded and traceable. The blockchain itself, because of its decentralized nature eliminates single points of failure. Cryptography makes this fool proof by hashing the unique id's. It also enables and secures the safe transaction of data without the necessity of third parties.

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3. <https://www.hyperledger.org/projects>
4. <https://hyperledger.github.io/composer/v0.19/managing/participantsandidentities>

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## EMPLOYEE TRACKER SYSTEM

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### ABSTRACT

*Every organization, whether big or small, has human resource challenges to overcome. Every organization has different employee management needs; therefore we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning, and will help you ensure that your organization is equipped with the right level of human resources for your future goals. Also, for those busy executive who are always on the route, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times.*

*These systems will ultimately allow you to better manage resources. One of the main features in employee management system is time tracking for employees. Effective time tracking mechanism saves both time and money for the organization.*

*Keywords: Employee, Tracking, Location, Fieldwork, Gps.*

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### 18. INTRODUCTION

This system is a combination of web as well as android application where the user will be using the android application and admin as well as HR will work with web application. This application is meant for field work Employers. The Employee will have this application in his android phone, when the user will login to the system his image will be captured and his GPS location will be send to the admin where admin will view image and GPS location in web application. When employee logout the system again the image will be captured as well as GPS location will be send to the admin. In order to keep track of the attendance as well as payroll of the employee, this system plays a major role. The role of the admin is to add new employee by entering his personal details and admin will provide the employee with identity number and password to the user so that he can access the application in his android phone.

Admin can view the GPS location of the employee by entering Employee Identity Number as well as Date. Admin can check the salary of the particular employee by entering date and employee ID. Admin can view latitude and longitude of the GPS location sent by the employee. Admin can change the password of the employee.

When the HR login to the system he can check the GPS location of the employee by entering employee ID and date. HR can check salary of the particular employee by entering employee identity number and date. This application helps Admin and HR to easily check the salary of the employee. Since GPS location of the employee is tracked, so employee will not attempt to add proxy attendance.

### What is mean by GPS?

The GPS (Global Positioning System) is a "constellation" of approximately 30 well-spaced satellites that orbit the Earth and make it possible for people with ground receivers to pinpoint their geographic location. The location accuracy is anywhere from 100 to 10 meters for most equipment. Accuracy can be pinpointed to within one meter with special military-approved equipment. GPS equipment is widely used in science and has now become sufficiently low-cost so that almost anyone can own a GPS receiver.

### Aim of the Project

In this world of growing technologies everything has been computerized. With large number of work opportunities the Human workforce has increased. Thus there is a need of a system which can handle the data of such a large number of Employees which is difficult for HR. This project simplifies the task of maintaining records and tracking the field employees because of its user friendly nature. The objective of this project is to provide a comprehensive approach towards the management of employee information.

### OBJECTIVE

1. Design of a web based HR management system to fulfil requirements such as track the field employee using image with GPS location.
2. To secure our data from a third party.

### Scope of the Project

In this project we develop the employee tracker system did not give any fake attendance who are all field work.

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19.EQUATIONS, FIGURES AND TABLES



1. EMPLOYEE TABLE

COLUMN NAME	DATA TYPE	CONSTRAINT
Emp_id	Int	Primary Key
Emp_Name	Varchar(50)	Not Null
Password	Varchar(50)	Not Null
Email	Varchar(50)	Not Null
Address	Varchar(50)	-

2. HR Table

COLUMN NAME	DATA TYPE	CONSTRAINT
Id	Int	Primary Key
Name	Varchar(50)	Not Null
Password	Varchar(50)	Not Null

3. TEST CASES FOR ANDROID APPLICATION

SR	TEST CONDITION	OPERATION ACTION	TEST DATA/INPUT	EXPECTED OUTPUT	PASS/FAIL
1	Android Application	Open attendance application present in Phone	-	Home pages displays	pass
2.	Login Pages	Enter UserID & Password	UserID Password	Camera Application open captures the photo & GPS Location to Admin	pass
3	Login Pages	Enter UserID only & leave password Blank	Password	Please Enter the password	pass
4	Login Pages	Enter password & leave UserID Blank	UserID	Please Enter the UserID	pass

4. Test cases for Admin website

SR	Test Condition	Operation Action	Test Data/Input	Expected Output	Pass/Fail
1	Home page	Open the Browser and enter the URL	-	Home pages displays	pass
2	Login Pages	Enter UserID & Password	UserID Password	Mysql data base is displayed	pass
3	Login Pages	Enter UserID only & leave password Blank	Password	Please Enter the password	pass

**20. CONCLUSION**

This chapter dealt with the user's needs and expectations for the new system. The next chapter deals with requirements analysis that is requirements needed to solve the problem being faced by the workshop in Rwanda. An employee management system will be the best solution for the problem. It will provide easy online access to the employees that are currently at work and what they are working on. Also easy to allocate jobs to the employees that are done with what they were doing. The system will provide quick and reliable access to the running of the business saving the manager a whole lot of time and money.

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**CASE STUDY OF FINANCIAL ASPECTS OF JILLA IVF CENTRE****Dr. Neetu Bhardwaz<sup>1</sup> and Rehan Iqbal Bijapuri<sup>2</sup>**Faculty<sup>1</sup> and Student<sup>2</sup>, Duragadevi Saraf Institute of Management Studies**ABSTRACT**

*The case study is based on an IVF clinic located in Andheri, Mumbai, Maharashtra called Jilla IVF Center which is a part of Jilla Hospital. Jilla IVF Center is an In Vitro Fertilisation Center that provides affordable and best treatment. The case study provides the details for Jilla IVF Center, it is apparent that there are less research or case studies like this one exist. Information for this case study was by gathered on the basis of the questionnaire filled by the owner of the clinic. The case study depicts the aspiring journey of the business which was incorporated with an objective of social welfare and well-being of all women no matter what socio-economic strata they belong to.*

*Keyword: IVF Centers, Financial Aspects, Social Welfare.*

**INTRODUCTION**

Jilla IVF Center is a subsidiary of Jilla Hospital, a clinic with speciality in IVF (In Vitro Fertilisation). In vitro fertilisation (IVF) is a process of fertilisation where an egg is combined with sperm outside the body, in vitro ("in glass"). The process involves monitoring and stimulating a woman's ovulatory process, removing an ovum or ova (egg or eggs) from the woman's ovaries and letting sperm fertilise them in a liquid in a laboratory. The fertilised egg (zygote) undergoes embryo culture for 2–6 days, and is then transferred to the same or another woman's uterus, with the intention of establishing a successful pregnancy. IVF process is mostly an considered option by the couple in the age bracket of 25 – 40 years who are unable (due to professional, practical, personal, health issues) and want to conceive a child. As per American Society for Reproductive Medicine about 5 – 10 percent prefer to go for biological child via IVF.

Center was endangered and is managed by Miss. Natasha Jilla. Entrepreneur of the center Natasha Jilla (Proprietor of the center) studied Masters in Business Administration from Narsee Monjee Institute of Management studies. She is also an MSc. Clinical Embryology from University of Leeds, United Kingdom. She has been quite sensitive and empathized towards society which motivated her to start affordable IVF care. She realized that lots of women who cannot afford treatment remain childless and most of their marriages are destroyed. She believed every woman deserves motherhood. This is what encouraged her towards the project of affordable fertility care.

**MISSION VISION**

Jilla IVF center's dedication is towards achieving the best chance of pregnancy for the patients. Every woman deserves motherhood. In the center, experienced teams will provide a discreet, professional and caring service; delivering clear, concise information to the patients and to give all efforts to bring smiles on parents face with a baby in your hand no matter what, at the most affordable cost.

**JILLA IVF CENTER**

Jilla IVF Center, Andheri was established in the year 2014 with a view to provide affordable IVF treatment and fertility care to the women who can't afford proper and effective treatment and hence are left childless. Business and the service model are designed in the way that the vision and mission towards the society can be achieved which would be beneficial to the patients and to the center. Some of the services which are provided at the center are

- IVF
- ICSI
- IUI
- Follicular study
- Hysteroscopy
- Laser assisted hatching
- Infertility Evaluation / Treatment and Infertility
- Laparoscopy
- Natural Cycle IVF

- Advice and consultation services

### INITIAL CHALLENGES

Initially when the center planning was initiated the key challenge for the proprietor i.e. Natasha Jilla was to give best and affordable fertility treatment to the patients and associate best and highly skilled doctors (clinicians), embryologists, counsellors and staff.

An even bigger challenge was to figure out a way to reduce the cost to the Center, so IVF could be made affordable but without affecting the pregnancy rates. For this, the team at Jilla IVF understood the basics of embryology and made their own equipment, which were more affordable than the ones that existed in the market which had to be imported from USA, Germany, other 1st world nations. The team realized that everything can be made right here in India, if the right minds came together. Thus, an IVF treatment that would cost about Rs 1.5 lakhs to 5 lakhs outside now could be done at 1 Lakh Approx. at Jilla IVF Center.

Interiors and infrastructure, in the initial phase of the business the team focused only and only on the lab and getting the best equipment while reducing costs thus patients found out that the interiors and the patient resting areas were quite ordinary and basic. But eventually the labs and other rooms were upgraded, while now Jilla IVF has one of the best interiors in the country.

### QUALITATIVE ASPECT

In order to provide high quality and effective treatment the center uses the latest and upgraded technology for the treatment. When the Center designed its own equipment's they added special features to it that were very helpful in the Indian environment and thus increasing the quality control and eventually the pregnancy rate. Apart from the team and equipment proprietor also emphasized on the infrastructure i.e. laboratory, consultation rooms, treatment rooms, operation theatre and reception, patient treatment plans, personalised care, everything had to be under strict quality control protocols. Standard operating protocols were made for every step

### FINANCIAL & COMPETITIVE ASPECT

Costing and fees were also one of the major aspects considered that is feasible to both the center and patients. Where the competitors of the Jilla IVF Center i.e. Nova IVF and Morpheus IVF Center provide the treatment at Rs (Indian Rupees) 3 lakhs, Natasha Jilla decided to slash the price by 70% percent (approximately) than the market price and provide the best treatment at an affordable price.

### GROWTH AND REVENUE

Emphasizing on the above-mentioned factors helped to build a positive and good image in the eyes of the patients. Initially 5 -10 IVF cycles per month were done at the center which eventually went up to 30 cycles per month which is approximately 200 percent growth whereas in terms of patient there has been 200 percent growth. Breakeven point for the center was achieved within the six months of its incorporation.

#### For Instance

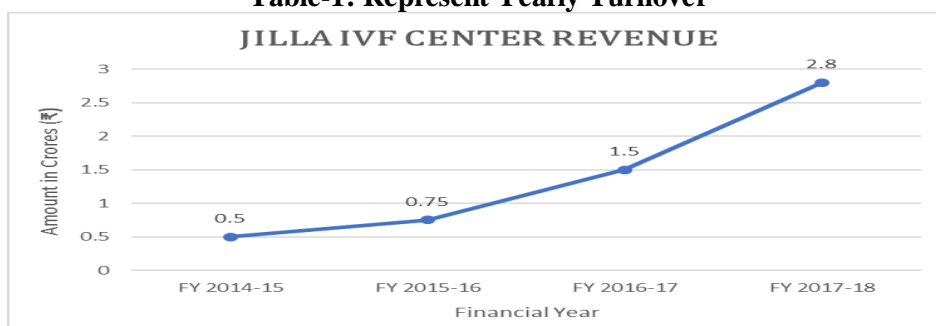
As per above statement Jilla IVF Center performs 30 cycles per month and the charges for per cycle is Rs 1 Lakh.

Calculation  $(1,00,000 \times 30 = 30,00,000$  per month)  $(30,00,000 \times 12 = 3,60,00,000)$

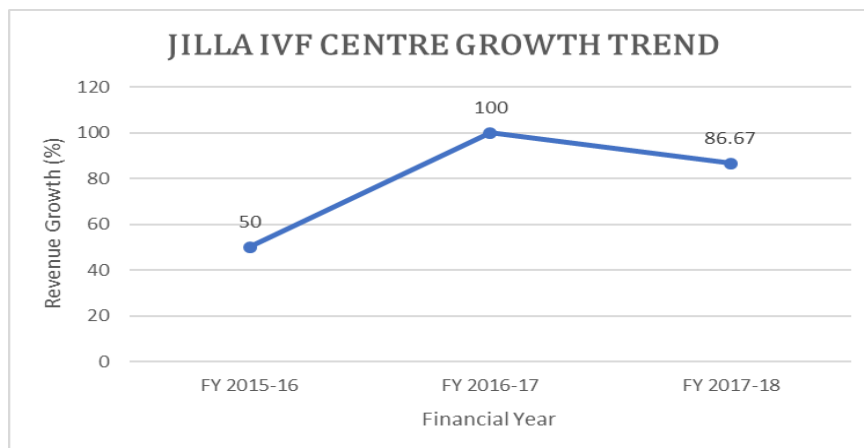
Hence the gross revenue or income for the center is Rs 30 Lakhs per month which accounts to Rs 3.60 Crores per annum.

The calculation done in this instance is on assumption basis in order to explain the revenue analysis shown in below mentioned graph.

**Table-1: Represent Yearly Turnover**



**Table-2: Growth Trend**



The calculation of the growth trend is done on the basis of the revenue amount mentioned in the first graph attached.

Calculation: For FY 2015-16,  $[(75,00,000 - 50,00,000)/50,00,000 \times 100] = 50\%$

Calculation for other two years have been performed in same manner considering previous year as the base year. For example, for FY 2017-18 the base year is FY 2016-17.

The above shown graph shows the trend and growth of Jilla IVF Center, Andheri turnover. It can be seen that the center's growth in terms of financial aspect is also very much positive and has the potential to grow at much higher rate than present.

#### GOVERNMENT ROLE

Indian Government had introduced major financial reforms and policies and took stern actions such as Goods and Services Tax (GST) and Demonetization which had turned around table of many big and small level companies even led to closure or shut down of many businesses. On one hand demonetization didn't had major impact on the business of the Jilla IVF Center on the other hand the cost of equipment and materials had increased hence instead charging excess amount of GST on the fee decision taken was to reduce the margins and increase the quantity of work thus stabilizing the profit.

#### CORPORATE SOCIAL RESPONSIBILITY

Jilla IVF Center also does two to three Pro Bono cases free of cost on monthly basis for the patients who cannot afford and are in need for the treatment. Natasha Jilla is looking forward to increase the number of Pro Bono cases and thereby treating the patients free of cost who can't afford the IVF treatment.

#### CONCLUSION

Natasha Jilla is very attached to Jilla IVF Center and it is obvious because the way she is working with her best efforts to build the center and her priorities and consideration are not only for patients and society but also for the center's team and staff which are like family to her. Along with the business aspect she is also striving for the social aspects which is the vision and mission of the Jilla IVF Center that is to work for the women and families who aren't financially stable. This is the reason that endeavours Natasha Jilla and Jilla IVF Center towards success and growth. Also, development and upgradations are done on timely basis and is at present well equipped to deal with all aspects of the IVF field. The major challenge for the center at present is managing the rate at which the Center is growing without affecting the success rate. It is very difficult to train the staff since none of the equipment are standard and even small mistakes can hamper the pregnancy rate. In futher, Natasha Jilla has plans to open multiple branches of the Jilla IVF Center to provide patients affordable IVF treatment at multiple locations. At present the plan is to open a new branch at Virar.

#### RESPONSE & REVIEWS

Some of the responses from patients are mentioned below

##### Mrs Padma Lingam

I am a housemaid and husband washes cars and does housekeeping for buildings. We lost our 17 years old, only son in an accident. We lost all our hopes of having family again. we heard about IVF the cost was more than 2 Lakhs. Making us realize even having a family needs money. When we heard about Jilla IVF pro bono cases got myself treated and conceived with an IVF – ICSI treatment and conceived. My daughter is 6 months old now and our life has completely changed. We will always be grateful to the Jilla IVF Team.

**Mrs Pawar**

With the help of IVF – ICSI process we have been able to conceive a healthy and beautiful baby in the first go itself. Thanks to Jilla IVF Team.

**Mrs Singh**

Natasha Jilla and IVF Center staff has been very supportive and here through IVF I am finally a proud mother of a baby girl. I would strongly recommend the Jilla IVF Center to other women too.

**Mrs Patel**

After many failed cycles, we decided to visit Jilla IVF Center. The amount of personal attention and treatment got here was incredible. After prolonged struggle I am finally a mother of blessed twins. All thanks to Jilla IVF center for such strong emotional, physical and mental support.

**Note**

Sincere thanks to Miss. Natasha Jilla, Proprietor of Jilla IVF Center for permission and strong support for building case study on her endangered successful venture.



# MANUSCRIPT SUBMISSION

## GUIDELINES FOR CONTRIBUTORS

1. Manuscripts should be submitted preferably through email and the research article / paper should preferably not exceed 8 – 10 pages in all.
2. Book review must contain the name of the author and the book reviewed, the place of publication and publisher, date of publication, number of pages and price.
3. Manuscripts should be typed in 12 font-size, Times New Roman, single spaced with 1” margin on a standard A4 size paper. Manuscripts should be organized in the following order: title, name(s) of author(s) and his/her (their) complete affiliation(s) including zip code(s), Abstract (not exceeding 350 words), Introduction, Main body of paper, Conclusion and References.
4. The title of the paper should be in capital letters, bold, size 16” and centered at the top of the first page. The author(s) and affiliations(s) should be centered, bold, size 14” and single-spaced, beginning from the second line below the title.

### **First Author Name<sub>1</sub>, Second Author Name<sub>2</sub>, Third Author Name<sub>3</sub>**

1 Author Designation, Department, Organization, City, email id

2 Author Designation, Department, Organization, City, email id

3 Author Designation, Department, Organization, City, email id

5. The abstract should summarize the context, content and conclusions of the paper in less than 350 words in 12 points italic Times New Roman. The abstract should have about five key words in alphabetical order separated by comma of 12 points italic Times New Roman.
6. Figures and tables should be centered, separately numbered, self explained. Please note that table titles must be above the table and sources of data should be mentioned below the table. The authors should ensure that tables and figures are referred to from the main text.

## EXAMPLES OF REFERENCES

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

### • **Single author journal article:**

Fox, S. (1984). Empowerment as a catalyst for change: an example for the food industry. *Supply Chain Management*, 2(3), 29–33.

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- **Text Book:**

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S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

Raine, A. (Ed.). (2006). *Crime and schizophrenia: Causes and cures*. New York: Nova Science.

- **Edited book having more than one editor:**

Greenspan, E. L., & Rosenberg, M. (Eds.). (2009). *Martin's annual criminal code: Student edition 2010*. Aurora, ON: Canada Law Book.

- **Chapter in edited book having one editor:**

Bessley, M., & Wilson, P. (1984). Public policy and small firms in Britain. In Levicki, C. (Ed.), *Small Business Theory and Policy* (pp. 111–126). London: Croom Helm.

- **Chapter in edited book having more than one editor:**

Young, M. E., & Wasserman, E. A. (2005). Theories of learning. In K. Lamberts, & R. L. Goldstone (Eds.), *Handbook of cognition* (pp. 161-182). Thousand Oaks, CA: Sage.

- **Electronic sources should include the URL of the website at which they may be found, as shown:**

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

- **Website of any institution:**

Central Bank of India (2005). *Income Recognition Norms Definition of NPA*. Retrieved August 10, 2005, from <http://www.centralbankofindia.co.in/home/index1.htm>, viewed on

7. The submission implies that the work has not been published earlier elsewhere and is not under consideration to be published anywhere else if selected for publication in the journal of Indian Academicians and Researchers Association.

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