

ISSN 2277 - 5730  
AN INTERNATIONAL MULTIDISCIPLINARY  
QUARTERLY RESEARCH JOURNAL

# AJANTA

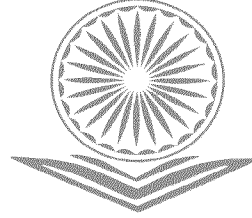
Volume - XII Issue - IV

October - December - 2023

PART - III

Peer Reviewed Refereed and  
UGC Listed Journal No. 40776

Single Blind Review / Double Blind Review



ज्ञान-विज्ञान विमुक्तये

IMPACT FACTOR / INDEXING  
2023 - 7.428  
[www.sjifactor.com](http://www.sjifactor.com)

❖ EDITOR ❖

Asst. Prof. Vinay Shankarrao Hatole  
M.Sc (Maths), M.B.A. (Mktg.), M.B.A. (H.R.),  
M.Drama (Acting), M.Drama (Prod. & Dir.), M.Ed.

❖ PUBLISHED BY ❖



**Ajanta Prakashan**

Jaisingpura, Aurangabad. (M.S.)

The information and views expressed and the research content published in this journal, the sole responsibility lies entirely with the author(s) and does not reflect the official opinion of the Editorial Board, Advisory Committee and the Editor in Chief of the Journal **“AJANTA”**. Owner, printer & publisher Vinay S. Hatole has printed this journal at Ajanta Computer and Printers, Jaisingpura, University Gate, Aurangabad, also Published the same at Aurangabad. (Maharashtra)

**Printed by**

Ajanta Computer, Near University Gate, Jaisingpura,  
Aurangabad.(Maharashtra) India.

**Published by**

Ajanta Prakashan, Near University Gate, Jaisingpura,  
Aurangabad. (Maharashtra) India.

Cell No. : 9579260877, 9822620877

E-mail : [ajanta3535@gmail.com](mailto:ajanta3535@gmail.com), [www.ajantaprakashan.in](http://www.ajantaprakashan.in)

**AJANTA - ISSN 2277 - 5730 - Impact Factor - 7.428** ([www.sjifactor.com](http://www.sjifactor.com))



## EDITORIAL BOARD



**Professor Kaiser Haq**

Dept. of English, University of Dhaka,  
Dhaka 1000, Bangladesh.

**Roderick McCulloch**

University of the Sunshine Coast,  
Locked Bag 4, Maroochydore DC,  
Queensland, 4558 Australia.

**Dr. Ashaf Fetoh Eata**

College of Art's and Science  
Salmou Bin Abdul Aziz University. KAS

**Dr. Nicholas Loannides**

Senior Lecturer & Cisco Networking Academy Instructor,  
Faculty of Computing, North Campus,  
London Metropolitan University, 166-220 Holloway Road,  
London, N7 8DB, UK.

**Muhammad Mezbah-ul-Islam**

Ph.D. (NEHU, India) Assot. Prof. Dept. of  
Information Science and Library Management  
University of Dhaka, Dhaka - 1000, Bangladesh.

**Dr. Meenu Maheshwari**

Assit. Prof. & Former Head Dept.  
of Commerce & Management  
University of Kota, Kota.

**Dr. S. Sampath**

Prof. of Statistics University of Madras  
Chennai 600005.

**Dr. D. H. Malini Srinivasa Rao**

M.B.A., Ph.D., FDP (IIMA)  
Assit. Prof. Dept. of Management  
Pondicherry University  
Karaikal - 609605.

**Dr. S. K. Omanwar**

Professor and Head, Physics,  
Sat Gadge Baba Amravati  
University, Amravati.

**Dr. Rana Pratap Singh**

Professor & Dean, School for Environmental  
Sciences, Dr. Babasaheb Bhimrao Ambedkar  
University Raebareilly Road, Lucknow.

**Dr. Shekhar Gungurwar**

Hindi Dept. Vasantao Naik  
Mahavidyalaya Vasarni, Nanded.

**Memon Sohel Md Yusuf**

Dept. of Commerece, Nirzwa College  
of Technology, Nizwa Oman.

**Dr. S. Karunanidhi**

Professor & Head,  
Dept. of Psychology,  
University of Madras.

**Prof. Joyanta Borbora**

Head Dept. of Sociology,  
University, Dibrugarh.

**Dr. Shrikrishna S. Bal**

I/C Principal (Retd.),  
Head, Department of Psychology,  
D.B.J.College, Chiplun, Dist. Ratnagiri (M.S.)

**Dr. Manoj Dixit**

Professor and Head,  
Department of Public Administration Director,  
Institute of Tourism Studies,  
Lucknow University, Lucknow.

**Prof. P. T. Srinivasan**

Professor and Head,  
Dept. of Management Studies,  
University of Madras, Chennai.

**Dr. P. Vitthal**

School of Language and Literature  
Marathi Dept. Swami Ramanand  
Teerth Marathwada University, Nanded.



# EDITORIAL BOARD



**Dr. B. R. Kamble**  
Kirti M. Doongursee College,  
Dadar, Mumbai-28.

**Dr. Sadique Razaque**  
Univ. Department of Psychology,  
Vinoba Bhave University,  
Hazaribagh, Jharkhand.

**Prof. Ram Nandan Singh**  
Dept. of Buddhist Studies University of Jammu.

**Dr. Safiqur Rahman**  
Assistant Professor, Dept. of Geography,  
Guwahati College Bamunimaidam, Guwahati,  
Assam.

**Dr. Jagdish R. Baheti**  
H.O.D. S. N. J. B. College of Pharmacy,  
Meminagar, A/P. Tal Chandwad, Dist. Nashik.

**Dr. Vimal K. Lahari**  
Assistant Professor, Department of Sociology,  
Banaras Hindu University, Varanasi, Uttar Pradesh.

**Dr. Pandit Sheshrao Nalawade**  
I/C Principle,  
Pandit Jawaharlal Neharu Mahavidyalay,  
Aurangabad. (M.S.)

**Dr. Anita V. Nikalje (Walde)**  
Assistant Professor, Department of Electronics and  
Telecommunication, Deogiri Institute of Engineering  
and Management Studies, Aurangabad. (M.S.)

**Mr. Padmakar Mane**  
Director,  
Ramanand Arya D.A.V. College, Mumbai.

**CA Dr. Ravindra N. Naik**  
I/C Principal,  
Ramanand Arya D.A.V. College, Mumbai.

**Prof. Arvind Chaudhari**  
Principal,  
Arts, Commerce & Science College,  
Bodwad, Dist- Jalgaon

**Dr. Romeo S. Mascarenhas**  
Former, Head of the Department of Commerce,  
Sau S. R. K. College of Commerce and  
Late M.B.B. Irani College of Arts, Vadkun, Dahanu.

**Dr. Sushama Patil**  
Assistant Professor,  
Ramanand Arya D.A.V. College, Mumbai.

**Ms. Dipika Gupta**  
Assistant Professor,  
Ramanand Arya D.A.V. College, Mumbai.



PUBLISHED BY



**Ajanta Prakashan**  
Aurangabad. (M.S.)



## **FORWARD**

It is Albert Szent-Gyorgyi, the Hungarian pharmacologist known for his work on vitamins and oxidation and who was awarded the Nobel Prize in Physiology or Medicine in 1937, who said “Research is seeing what everybody else has seen and thinking what nobody else has thought”. If we analyse this statement deeply, we will realize that every one of us see many things happen around us every day and have trained ourselves to discard them as a matter of inconsequence or something not worth bothering about.

But one individual amongst us would start wondering or worrying as to why such a thing happens, whether it could be improvised to get a socially beneficial outcome or if something could be done to tone down or remove the hazardous implications of it.

If such individuals become an integral part of the society, many things that happen around us would be watched with a clear intent, analyzed through a discerning and systematic approach, studied in depth to identify the benefits that could be derived from them and watched with caution to mitigate or nullify the negative consequences that might result from them.

Research ultimately is the triggering switch that energises the human mind and assigns an authentic reason for our inner desire to explore the unknown. While doing so, what is important is not the success or failure of our efforts. It is the joy of having explored matters which have been ignored by others and the small and large pieces of learning we could acquire during that journey - they are what really matter the most to an intellectual mind.

The outcome of any research is measured by the knowledge one obtains during the research process, the answers to many 'WHYs', 'WHATs', and 'HOWs' and above all, the sense of achievement one gets at the end of the long research process. For a true researcher, appreciation or awards do not matter as much as the personal satisfaction he or she derives by proving or disproving a self-stated hypothesis in a logical, rational and scientific manner.

Let the spirit of Research flourish! Let our quest for Research lift us up from the mundane and rote mindset we have gradually built within ourselves in today's world of comfort and conflicts!

**RAMANAND ARYA D.A.V. COLLEGE (AUTONOMOUS)**



## ❧ CONTENTS OF PART - III ❧

Sr. No.	Title & Author	Page No.
1	A Study on Significance of Packaging in the Marketing of Products <b>Dr. (CA) Seema Tarak Shah</b>	1-8
2	A Study of Demographic Factors that Impact Financial Literacy amongst Youths in Mumbai <b>Dr. Jaison Baby Thomas</b>	9-16
3	Rural Resilience: An Empirical Study of CSR, Sustainability, and ESG Initiatives <b>Mr. Siddhesh V. Wairkar</b> <b>Dr. Khushpat Jain</b>	17-24
4	A Study of Factors Influencing Male Consumers' buying behaviour towards Men's Lifestyle Apparel <b>Ms. Sonam V. Singh</b> <b>Dr. Mrs. Rashmi M. Agnihotri</b>	25-33
5	Changing Paradigm of Health Insurance in India Amid Technological and AI Revolution <b>CS Charul Y. Patel</b> <b>Dr. Varsha Ganatra</b>	34-40
6	GST Implementation in India: An In-Depth Analysis of Economic Impact through Secondary Data Examination <b>Dr. Ravindra Nagesh Naik</b>	41-49
7	Customer Relationship & behaviour in the Traditional Grocery Business in India: Strategies, Challenges, and Future Trends <b>Dr. Kulkarni Vinod Ramakant</b> <b>Supriya Subhash Kasliwal</b>	50-58
8	A Study on Impact of GST on Common Man with Reference to Davanagere City, Karnataka <b>Dr. Basavaraj</b> <b>Anjaneya B.</b>	59-65
9	Entrepreneurship: The most Trending Mantra of the Century <b>Dr. Kulkarni Vinod Ramakant</b> <b>Shainee Deb</b>	66-71

❧ CONTENTS OF PART - III ❧

Sr. No.	Title & Author	Page No.
10	A Descriptive Study of Socio-Economic Factor that Impact Financial Literacy amongst Youths in Mumbai <b>Dr. Jaison Baby Thomas</b>	72-79
11	Emerging Trends in Service Sector Industry and Contribution of Hotel Industry in Economic Development of India <b>Mr. Hardik Goradiya</b> <b>Dr. G. D. Giri</b>	80-85
12	Waste Management - A Project with Mumbai Municipal Corporation <b>Adv. Rajeev Karkhanis</b>	86-92
13	A Systematic Review on the Relationship between Work Life Balance, Job Satisfaction and Employee Commitment <b>Dr. Poonam Naresh Kakkad</b> <b>Ms. Naveena Suresh</b>	93-98
14	Challenges and Benefits for Students in Digital Transformation in India <b>Mr. Vishanlal L. Gupta</b> <b>Sudhir S. Godi</b>	99-107
15	Energy Efficient Buildings in India <b>Ms. Shraddha Ghorpade</b>	108-114
16	A Study on the most Effective Media to Advertise for Youth <b>Dr. Shobha B. Mathew</b>	115-123
17	Consumer Buying Behavior towards Green Electronic Products - Indian Perspective <b>Mrs. Kirti Dilip Sarode</b>	124-132
18	A Study on Evaluating Role of Lead Bank in Financial Inclusion of Rural Areas <b>Prof. Dr. Shiva Padme</b> <b>Prachi J. Mane</b>	133-140
19	Application and Implementation of Total Quality Management in the Higher Education System <b>Aafrin Yusuf Khan</b>	141-148
20	Causal Relationship between Macroeconomic Variables and Index of Industrial Production (IIP) <b>Basutkar Thirupathi</b>	149-152



# 1. A Study on Significance of Packaging in the Marketing of Products

**Dr. (CA) Seema Tarak Shah**

Department of Accountancy, Smt. MMP Shah Womens  
College of Arts and Commerce, Mumbai.

---

## **Abstract**

In this research, the product perception as well as various package clues that influence the public is revealed. Usually packaging is considered as a part of the product and customers might find it tough to distinguish between the two (the theory of Gestalt psychology). Factors like typography, color of packaging, graphics and illustrations can impact product perception. As per the study it is believed that many customers appreciate the quality of the product after buying the packaged product of their choice. The paper considers the significance of packaging in the marketing of products.

**Keyword:** Product packaging, color of packaging, graphics, etc

## **Introduction**

Regarding packaging design, this is a broad subject and many aspects can be studied. The crucial intention of this study is to understand the opinions and perspectives of the consumers on different product designs. That is, check how consumers perceive and evaluate the patterns, to accept the innovative and attractive packaging design, colors scheme and graphics on the packaging, Quality of packaging material. The crucial goal of this research is to understand the factors as well as the significance of the designs of packaging in relation to the perception of the customers. This will help companies create effective packaging designs and attract customers **Habil and Malkewitz, K. (2006).**

One of the main functions of packaging design is to promote the items in the packaging. Depending on the product, the packaging design can be simple and clear or colorful. Advertisers want you to see their products first among all other favorite products. The functional parts of the product can be printed on the packaging box, or nutrition label can be provided for consumers to view. Remember to walk along the grain aisle. Which boxes stand out and attract your attention

almost immediately? If you find yourself looking at a cereal box and cause some emotion, then the advertiser has successfully attracted your attention as a consumer.

### **Literature Review**

**2.1 M. Berkowitz., (2018).** The author's qualitative research on packaging shows that maximum customers feel that the pattern of the packaging is related to the comfort of usage and portability of the commodity. **Liem, D.G., et.al (2012).** In their study attempt to analyses Add master and LINPAC Packaging Ltd. have jointly developed the silver additive Biomaster® to develop antibacterial trays and lids to prevent the reproduction of pathogenic organisms such as Salmonella, Campylobacter and Salmonella. E. coli in fresh meat.

**2.2 Van Rompay, et al. (2011).** Nowadays, bacteriocins based on lactic acid bacteria are mainly hydrophobic, cationic and amphiphilic peptides, and are vastly utilized as antibacterial agents primarily against Gram-positive bacteria.

**2.3 Kauppinen-Räsänen, (2014).** The combination of packaging and branding may make it possible for manufacturers and companies to be in a favorable position to compete with adversaries in a highly competitive market by increasing the probability of consumers buying products.

**2.4 Schifferstein, H.N.J. (2009).** In his study focuses Branding, marketing, strategy, and advertising are broad and crucial terms pertaining to marketing. Several marketers, customers and researchers may not pay outstanding attention to the creative aspects or art of packaged products.

**2.5 Krishna, A. (2012).** Thus, it can be inferred that this part of packaging is extremely powerful and can effortlessly influence the judgment of consumers.

### **3. Objective**

The main aim of the study is to assess the consumer behaviour in terms of the packaging of the products

### **4. Hypothesis**

**H1:** There is a relationship between consumer's buying and packaging color.

**H2:** There is a relationship between consumer's buying behavior and packaging material.

**H3:** There is a relationship between consumer's buying behavior and packaging innovations.

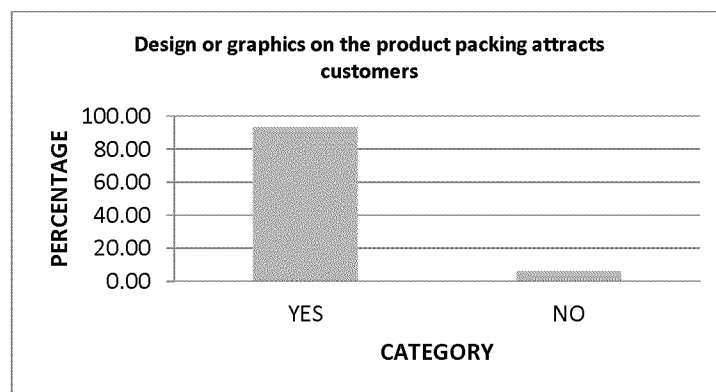
## 5. Data Analysis

The population chosen for the study ranges from geographical area of Greater Mumbai. Total 205 respondents were surveyed 118 respondents were male which is 57.56%. Remaining 87 respondents were female. 42.44% this reveals that maximum respondents were Male. For the present research, the researcher have used both primary and secondary data. Secondary data is collected from books and journals (peer reviewed and ugc care listed), magazines, newspapers. Primary data is collected using the digital method of collection through Google form. Total 118 respondents have been surveyed. Advanced Excel methods is used to process the data. Both descriptive and inferential design have been used to fulfill the objectives and derive the conclusion.

### Design or graphics on the product packing attracts customers

**Table No. 5.1 - Are You Attracted by the Designs or Graphics On The Product Packaging?**

Category	No. of Respondents	Percentage
Yes	192	93.66
No	13	6.34
<b>Total</b>	<b>205</b>	<b>100.00</b>



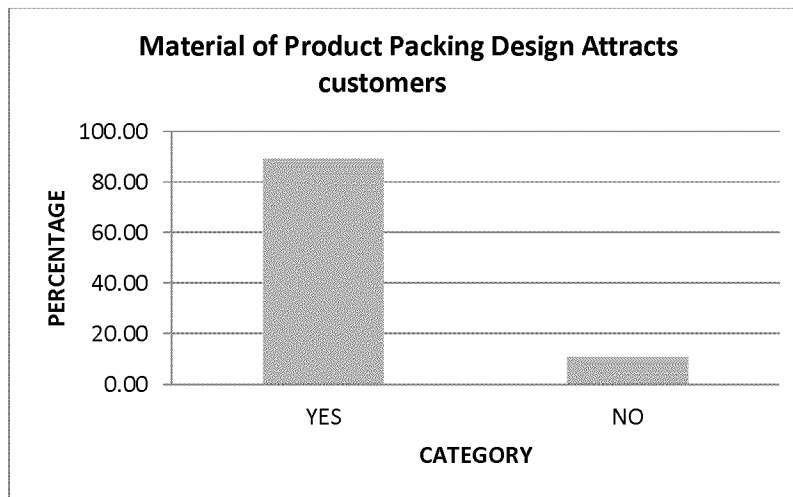
**Figure no. 5.1 graph showing data about design or graphics on the products packaging attracts customers.**

The above table and graph shows the data about does the design and graphics on the products packaging attracts the customers. When 205 respondents were surveyed out of which 192 respondents says that they are attracted by the design or graphics on packaging which is 93.66%. Remaining 13 respondents does not attract towards design or graphics on packaging that is 6.34% this concluded that majority of the respondents attract towards *design or graphics* packaging of the products.

### 5.1 Material of Product Packing Design Attracts customers.

**Table No. 5.2 - Are You Attracted By The Material Of The Product Packaging Design?**

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE
YES	183	89.27
NO	22	10.73
TOTAL	205	100.00



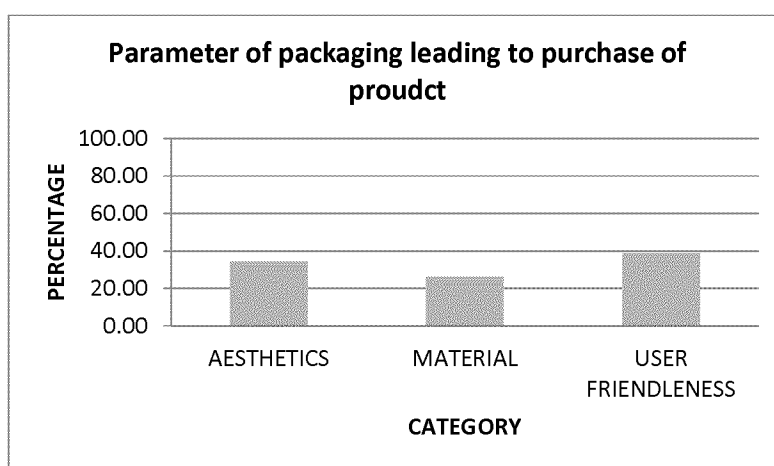
**Figure no. 5.2 graph showing data about material of the product packaging design attracts customers.**

Like other visual elements of packaging materials also communicate and consumers associate certain intrinsic values with the material of a product. In addition materials also affect the perceived quality of a product, which means consumer perceptions regarding certain materials could change the perceived quality of a product. Some packaging materials are to be made in a way, so that it could bear the temperature below zero or high temperatures in microwave depending on the product functionalities and the needs of a consumer. In one study on milk packaging by the author in [40:899-912] three packaging materials were discussed which includes glass, plastic, and cardboard. The above table and graph shows the data that are the respondents attracted by the material of the product packaging design. When 205 respondents were surveyed 183 respondents agreed that they are attracted by the material of the product packaging design which is 89.27% and 22 respondents do not get attracted by the material of the product packaging design. This results that majority of the respondents get attracted by the material of the package.

### 5.2 Parameter of packaging leading to purchase of product

**Table No. 5.3 - Select The Parameter Of Packaging Due To Which You Prefer To Buy The Products?**

Category	No. of Respondents	Percentage
Aesthetics	71	34.63
Material	54	26.34
User Friendliness	80	39.02
<b>Total</b>	<b>205</b>	<b>100.00</b>



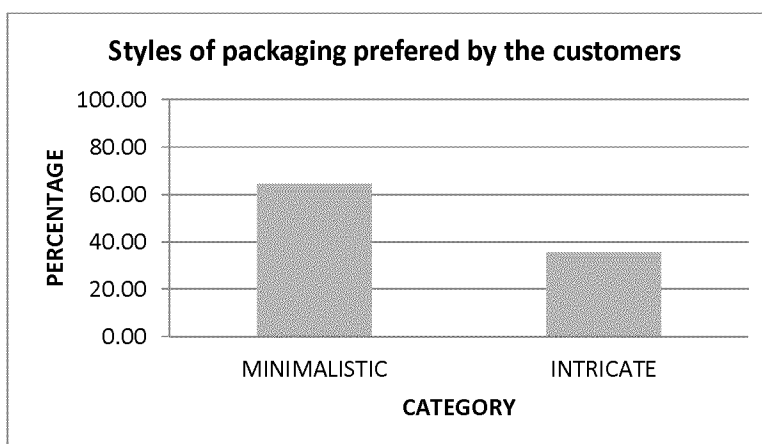
**Figure no 5.3. graph showing data about parameter of packaging leading to purchase of the products.**

In the above table and graph data represents the parameter of packaging leading to purchase of products. When 205 respondents were surveyed out of which 71 respondents told that the packaging of the products should be aesthetics which is 34.63%. Nearly 54 respondents material should be of good quality which is 26.34%. Remaining 80 respondents told that the packaging of the products should be user friendly that is 39.02%. This results that the parameter of packaging that lead to purchase of product should be user friendly.

### 5.3 Styles of packaging preferred by the customers

**Table No. 5.4 - Which of the below Styles of Packing do you Prefer?**

Category	No. Of Respondents	Percentage
Minimalistic	132	64.39
Intricate	73	35.61
<b>Total</b>	<b>205</b>	<b>100.00</b>



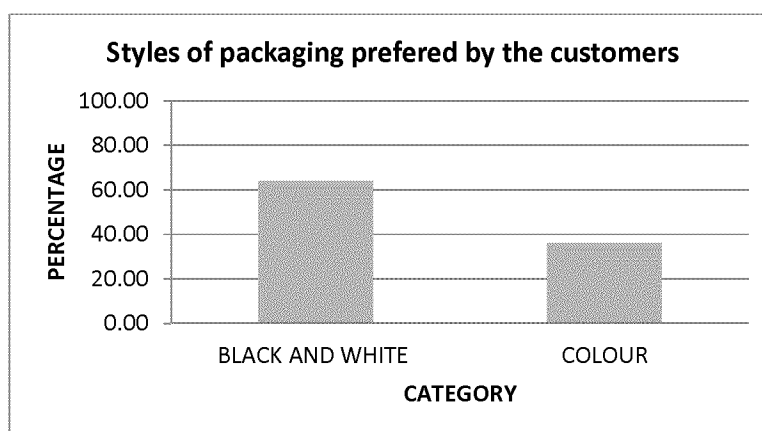
*Figure no 5.4. graph showing data about different style of packaging which is preferred by customers.*

The above table and graph shows the data about different styles of packaging of the products. When 205 respondents were surveyed out of which 132 respondents prefer minimalistic style of packaging which is 64.39%. Remaining 73 respondents liked intricate style of packaging of products that is 35.61% this results that maximum respondents liked minimalistic style of packaging.

#### 5.4 Styles of packaging preferred by the customers

**Table No. 5.5 - Which Packaging Would You Prefer?**

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE
BLACK AND WHITE	131	63.90
COLOUR	74	36.10
TOTAL	205	100.00



*Figure no.5.5 graph showing data about styles of packaging preferred by the customers.*

The above table and graph shows the data about styles of packaging preferred by different customers. Out 205 respondents 131 respondents preferred black and white packaging which is 63.90%. Remaining 74 respondents liked colour packaging that is 36.10%. this reveals that maximum respondents like black and white packaging style of products.

## **6. Hypothesis Testing**

**Hypothesis 1:** A connection between color of packaging and customers' purchasing exists:

The color of packaging and customer's buying tendency are correlated positively ( $r=0.562$ ,  $p=0.0001$ ). A reasonable and an important connection exist between the color of packaging as well as the purchasing tendency. Thus we can conclude that the hypothesis is acknowledged. People are drawn towards dark colors instantly and the usage of dark colors in the packaging of goods can attract the attention of the customers quite effortlessly.

**Hypothesis 2: A connection between the material of packaging and customer's purchasing tendency exists.**

The material of packaging and the customers' purchasing tendency are negatively correlated ( $r= -0.006$ ,  $p=0.914$ ). Thus, the customers' purchasing tendency is not affected by the material of packaging. Thus, we can conclude that the hypothesis is overruled.

**Hypothesis 3: A connection between innovative packaging and customers' purchasing tendency exists:**

Innovative packaging and customers' purchasing tendency are positively correlated ( $r=0.335$ ,  $p= 0.0005$ ). Thus we can conclude that the hypothesis is acknowledged.

## **7. Conclusion**

In today's world, packaging is not just a box or cover in which the product is placed but it has many more important functions. The markets today have to offer easily usable, environment friendly, reasonable and creative options of packaging to the customers as now the perception or understanding of the consumers is constantly changing. Consumers require packaging that comes in various colors, shapes and sizes. The consumers are now gaining awareness and even their demand has started increasing and therefore several options of packaging need to be implemented. The various schemes of packaging influence the customer while making a decision to buy the product. The products' market share grows if the schemes of packaging are effectively implemented.

Proper and clear image or colour of packaging which arouse a satisfactory emotion in the customers as well as packages which can be easily opened, closed, handled and disposed can attract and arouse interest of the customers. An apt amalgamation of these factors can make the product quite attention- grabbing and beautiful. Important factors of a package are colour, graphics, form, size, wrapper material and design, creativity, country of origin, information about the product, the brand and the company or the producer. In addition to this, the influence of the factors of the package on the customers' decision of buying a product has been assessed and it is found that it depends on the customer's level of involvement ; certain traits that are peculiar to the customers and the pressure of time.

### References

- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(1), pp 332-351.
- Liem, D.G., Toraman Aydin, N., & Zandstra, E.H. (2012). Effects of health labels on expected and actual taste perception of soup. *Food Quality and Preference*, 25(1), pp192- 197.
- Schifferstein, H.N.J. (2009). The drinking experience; cup or content? *Food Quality and Preference*, 20, pp .268-276.
- Van Rompay, T. J. L., & Pruyn, A. T. H. (2011). When visual product features speak the same language: Effects of shape-typeface congruence on brand perception and price expectations. *Journal of Product Innovation Management*, 28, pp 599-610.
- M. Berkowitz. "Product Shape as a Design Innovation strategy". *The Journal of product Innovation Management*, vol.4, pp.274-283, 1987.
- H. .T. Hannele Kauppinen-Raisanen. "Exploring consumers' product-specific color meanings". *Qualitative Market Research: An International Journal*, vol. 13, pp.287-308, 2010



## 2. A Study of Demographic Factors that Impact Financial Literacy amongst Youths in Mumbai

**Dr. Jaison Baby Thomas**

Asst. Prof., SVKM's The Mithibai College of Arts, Chauhan Institute of Science & Amrutben Jivanlal College of Commerce and Economics, Vile Parle (West), Mumbai.

---

Liberalization, privatization and globalization have contributed towards the cause of growth and development of Indian economy and expanded India's financial market drastically. Also, these phenomena allowed a huge number of financial products to enter the financial market of India in the form of credit one or investment alternative. However, poor Knowledge of financial literacy, which is also known as financial illiteracy influence the aspects which are critical while making a rational judgement, consequently affects an individual's financial decisions. As an outcome of vague understanding, the investors fail in choosing the most appropriate financial alternative which can surpass the dominating inflation rate in the economy and provide the investors with net positive return. The study has social significance as findings helps different stakeholders in making policy changes in achieving higher Financial Literacy.

**Keywords** - Financial Literacy,

### 1. Introduction

Over the last several years, the issue of financial literacy and financial education has risen on the agendas of educators, community groups, businesses, government agencies, organizations, and policy makers. A number of researches have also been done in the past, on the issue of financial education, either from a policy perspective or a pragmatic perspective.

In their report, Jacob et al, (2000) highlighted that, Financial Knowledge has not only become a useful skill but also a necessary tool for existence, innovation of marketing and financial products, re-orientation of economical industry, massive drift in the attitude of consumers, technological improvement and variations in retirement plans and pensions are certain aspects that are significantly affecting decisions and behaviour towards finance. Therefore, challenging financial literacy, says Michelle Coussens, (2005).

In his research, Hogarth, (2002) has mentioned that financial education deals with 3 aspects. 1) Having the education, Knowledge and data regarding money management, banking,

investments, credits, taxes and insurance. 2) Knowledge of principals of money management and assets (e.g., the time value of money in investments and the pooling of risks in insurance). 3) Utilizing that Knowledge and data to think, apply and examine financial decisions.

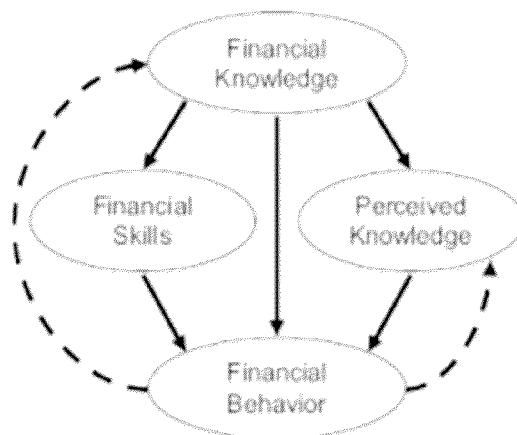
Knapp, (1991) asserted that for the welfare of contemporary modern society, modern consumer education plays key role. To collect the reactions regarding consumer education, Knapp, (1991) conducted a consumer elite's survey and gathered data about given benefits: 1) Cascades life skills that's essential in everyday life. 2) Upholds rational thinking. 3) Propagates self-reliability and confidence. 4) inculcates widely agreed essence. 5) develops the life's quality.

## **2. Review of Literature**

It is often assumed that financial literacy's center is financial knowledge; Financial Knowledge should be differentiated from general knowledge. For example, it was found by Hung, (2009) that during the prediction of performance based on a hypothetical investment task, finance-specific Knowledge left behind general knowledge.

As argued by Lyons, (2007) During the process of conceptualizing financial literacy, financial knowledge, skills, behavior, and their mutual relationship should be taken into account. It's also been added that, in particular, financial knowledge reflects certain basic form of financial literacy. Obtained financial knowledge reflects financial literacy and influences financial skills that depends on knowledge. Actual knowledge, perceived knowledge, and skills are being depended upon by actual financial behaviour. Researchers were further able to find that these relationships are not always entirely perfect, as singular factors themselves are influenced by various internal and external factors. Hence financial literacy has been defined as knowledge of basic concepts regarding economics and finance and having the knack to wield that knowledge and other financial knacks to manipulate financial resources wisely in order to live happily ever after. As noticed by Hogarth et al, (2002) there exist a correlation between financial knowledge and behaviour, despite an opaque path of the outcome is not explicit. Figure 1 represents the logical relationships among of financial literacy components. (*Source: Angella A. Hung, Andrew M. Parker and Joanne K. (2009). Defining and measuring financial literacy. Working Paper Series: WR 708. Department of Labor and the National Institute on Aging via the RAND Roybal Center for Financial Decision Making.*)

Figure 1. Conceptual Model of Financial Literacy



Schagen & Lines, (1996) in a report submitted to the National Foundation for Educational Research, financial literacy was defined by The United Kingdom as given. The ability to make informed judgments and to take effective decisions regarding the use and management of money. This definition has been later used by number of researchers, where they have modified this definition, whereas Roy Morgan Research, (2003) explained that financial literacy is a well-informed community and doubtful decision makers in all the levels of their budgeting, spending, and saving. However, the steps taken in financial literacy should reflect particular situation and were therefore relative. Whereas Knowledge should only be wielded during the time of necessity and circumstances rather than in the entire line up of financial products and services, some among them aren't used nor need Roy Morgan Research, (2003).

A unique observation, noticed by Beal & Delpachitra, (2003) proposed, individuals who are financially literate should not only possess the ability to understand the key concepts in money management, a working Knowledge of financial institutions, systems and services and a range of analytical skills, but also possess a facilitating attitude to effective and responsible management of financial affairs. This particular conceptualization of financial literacy, thus comprises a skill base incorporating both cognitive (Knowledge) and psychological (willingness and confidence) concepts. In a survey article Hogarth et al., (2002) Michelle Coussens, (2005) observed that —a consistent theme running through most definitions of financial literacy included being:

1. Knowledgeable, educated and informed on issues of money and assets, banking, investments, credit, insurance and taxes.
2. Understanding of basic concepts underlying the management of money and assets.

3. Using the Knowledge and understanding to plan and implement the financial decisions.

In other words, this research has concluded, many of the definitions of financial literacy encompass Knowledge and understanding of principle aspects of financial literacy and the skill to wield these to schemes and experiment financial decisions.

Decision making can be described as the phenomenon of selecting a particular alternative from some possible of alternatives. It is a criterion that follows proper assessment of all the alternatives. Karlsson, (2004) stated that Individuals take decisions depending on on their personal finances on a day-to-day manner, and although these decisions are important for day to-day existence it can be a daunting task. The value offered with examining of the consumer decision making procedure is widely recognized by many researchers.

Earlier research in the field of consumer behaviour and financial services has exposed that lifecycle stages, age, academics, sex and income are the key factors to keep in mind when seeking to understand the needs and wants of customers Clark, Gough & Sozou, (2005) and the type of financial product or service being purchased greatly affects the consumers' buying behaviour Beckett, (2000) Howcroft, (2003).

Hodge (2003) conducted an analysis on the attitudes of investors about earning quality, auditor independence, and the use of audited financial data. The findings of this study indicate that individuals who have lower opinions of earning quality tend to place more emphasis on a firm's audited financial statements and engage in fundamental examination of those statements when making investment decisions.

Hussein and al Anood (2009) conducted a study in which they found a total of 37 variables that have an impact on the investment decisions made by investors in the United Arab Emirates. The present study classified a total of 37 factors into eight distinct categories. There are eight factors that pertain to the coincidence between self-image and company image. Additionally, there are eleven variables that correspond to accounting data, six variables that correspond to neutral data, five variables that pertain to advocate advice, and seven variables that relate to personal financial demands. According to a research by the National Council on Economic Education (2007), the selection of investment assets is mostly influenced by the factors of safety and liquidity.

### Hypothesis

$H_0$  : There is no significant association between students' demographic variables and their financial literacy level.

$H_1$  : There is a significant association between students' demographic variables and their financial literacy level.

This hypothesis is tested using regression analysis. The overall literacy percentage scores are calculated on the basis of correct answers to the number of questions raised and then employed as dependent variable while as Age group, Gender, .

### Research Methodology

#### Participants

Data was collected from 1390 students from Higher Educational institutions in Mumbai using Convenient Sampling method. Cochran's formula of variability was used to decide the sample size as the population of students in Higher Educational institutions in Mumbai was not known.

#### Questionnaire

A structured questionnaire was used for data collection. Pilot study was conducted on 1390 students in Higher Educational Institutions in Mumbai. Appropriate changes were made in the questionnaire before final data collection.

#### Model Summary

R	R Square	Adjusted R Square
.226	.051	.048

Source: Data analysis

**Interpretation:** The independent variables contribute only 7% change in the variance of dependent variable.

#### ANOVA table

	Sum of Squares	D.f.	Mean Square	F-value	P-value
Regression	34025.207	4	8506.302	18.628	.000
Residual	632451.440	1385	456.644		
Total	666476.647	1389			

**Interpretation:** p-value less than that of 0.05 indicates that model is significant fit.

**Model Parameter**

	Unstandardized Coefficients		t-test value	p-value
	B	Std. Error		
(Constant)	49.113	3.041	16.151	.000
Age	1.162	0.750	1.548	.122
Gender	-5.535	1.158	-4.778	.000
Faculty of Study	-0.118	.420	-0.282	.778
Monthly-obtained money	3.823	.596	0.169	.000

Source: Data analysis

**Interpretation:** p-value for Age is greater than that of 0.05 indicates that age is not having significant impact on their financial literacy level. While other demographic and economic variables are with p-value less than 0.05 indicates significant impact on their financial literacy level. Therefore, we **reject** null hypothesis partially for Gender and Monthly obtained money and accept for Age and Faculty of study. The following diagram shows the same thing.

The positive coefficient of Age and Monthly obtained money indicates that the higher age group more the literacy but for age its non-significant and for monthly obtained money its significant. While as for Gender we coded Male = 1 and Female = 2 therefore the negative and significant coefficient indicates male are more financially literate than female. The Faculty of study is coded as Arts = 1, Commerce = 2, Science = 3, Management = 4 and Law = 5. Therefore, the positive and significant coefficient indicates that people from Arts faculty are less literate than others and this increases, as we are moving towards more professional courses. The following diagram shows the same thing:

**Demographic variables correlation tree**

Source: Questionnaire.

**Findings of the study**

- This study assisted in understanding the level of financial literacy among the students of Mumbai suburbs. This assisted marking the relationship between demographics and the socio and economic factors of students to their financial literacy level, the relationship between financial literacy level and their savings to monthly income ratio. Their preference towards various sources of data for investments and the impact of this financial acumen on their future financial outlook and prospects.

- The financial literacy parameters were compared with the socio-economic factors such as age, gender and income and it was found that; the p-value of the chi-square test was less than 0.05, which assisted in concluding that there is a significant association between student's age and the financial literacy level, the chi-squared p-value of less than 0.05 again proved that there is a significant association between students' gender and their financial literacy level.
- It is observed that male have more financial literate than female. The p-value less than 0.05 for the chi-square indicates significant association between students' income and respective financial literacy parameter. Lastly, for socio-economic factors; Since p-value for the chi square is less than that of 0.05 indicates that there is a significant association between students' stream and their financial literacy level.
- Regression analysis was employed to determine the impact of student's demographics and socio-economic variables on their financial literacy levels. The independent variables of age, gender, faculty of study and monthly income obtained contribute only 7% change in the variance of dependent variables of financial literacy. p-value for Age is greater than that of 0.05 indicates that age is not having significant impact on their financial literacy level.

### **Conclusion**

Based on data analysis some conclusions are presented as under.

- All the respondents (students) do not understand the basics of investments and its calculation.
- From the analysis of financial literacy questions, it is also found that the majority students are less financially literate on some of subjects of financial literacy and even some of them do not understand the important concepts at all.
- Further, it is also found that financial literacy does have statistically significant impact on investment decision. It may be concluded that financial literacy may empower the students to make investment decisions in future.
- With regard to the relationship between financial literacy and financial behavior, it was found that financial literacy leads to controlled spending behavior and encouraged saving behavior and also have a significant impact on investment decision of investors.

**Limitations of the study**

In the study, all the respondents (i.e. students) were from urban areas of Mumbai Western Suburbs. It may be possible that the views of respondents from rural areas turn out to be different from the respondents belonging from urban areas.

**Bibliography**

1. Abdelkarim, N., Shahin, Y. A., & Arqawi, B. M. (2009). *Investor perception of information disclosed in financial reports of palestine securities exchange listed companies. In accounting & taxation* ♦ (Vol. 1, Issue 1). Wwww.p-s-e.com
2. Ajzen, Icek., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. 278.
3. Alba, J. W., & Hutchinson, J. W. (2000). Knowledge Calibration: What Consumers Know and What They Think They Know. In *JOURNAL OF CONSUMER RESEARCH, Inc.* • (Vol. 27).
4. Bianculli, David. (1992). *Teleliteracy: taking television seriously*. Continuum. 5.
- Boadway, R., & Wildasin, D. (1995). Taxation and Savings: A Survey. In *Fiscal Studies* (Vol. 15).
5. Burnet, M. (1965). *ABC of Literacy*. United Nations Educational, Scientific, and Cultural Organization, Place de Fontenoy, Paris-7e, France.
6. Dellavigna, S. (2009). Psychology and economics: Evidence from the field. *Journal of Economic Literature*, 47(2), 315–372. <https://doi.org/10.1257/jel.47.2.315>
8. Hogarth, J. M. (2006). Financial Education and Economic Development Improving Financial Literacy International Conference hosted by the Russian G8 Presidency in Cooperation with the OECD. *Improving Financial Literacy International Conference Hosted by the Russian G8 Presidency in Cooperation with the OECD* , 1–34.
9. Lusardi, A., & Mitchell, O. (2009). *How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness* (NBER working paper No. 15350). <https://doi.org/10.3386/w15350>
7. Lusardi, A., & Mitchell, O. S. (2006). *Financial literacy and planning: Implications for Retirement Wellbeing* (Working Paper 17078).



### 3. Rural Resilience: An Empirical Study of CSR, Sustainability, and ESG Initiatives

**Mr. Siddhesh V. Wairkar**

Research Scholar, K. P. B. Hinduja College of Commerce, University of Mumbai.

**Dr. Khushpat Jain**

Research Supervisor, K.P.B. Hinduja College of Commerce, University of Mumbai.

---

#### **Abstract**

Due to legal requirements and company strategy planning, CSR, ESG, and Sustainability have become more important during the past 20 years. In order to better understand this subject, academicians can use this study's comprehensive analysis of rural CSR and ESG initiatives. For this study, data from 1973 through 2023 were extracted from the Scopus database. The basic search criteria of "title," "abstract," and "keywords" were used to search the Scopus database. At first, 438 papers were discovered. This collection was condensed using inclusion and exclusion criteria to 371 documents. According to surveys, this field of study had a major uptick in the late 1990s. India published the most scholarly articles between 2010 and 2023, followed by the US and the UK. The majority of this field's publications come from the University of Nigeria. South Australia and British Columbia come next. Finally, businesses must prioritize CSR and ESG investments in industries including agriculture, women's empowerment, financial literacy, and industrial growth. By doing this, businesses can increase profits while fostering sustainable growth.

**Keywords:** Corporate Social responsibility, Sustainability, ESG, Scopus, Bibliometric Analysis

#### **1. Introduction**

In the past two decades, the concept of corporate social responsibility (CSR) has become more significant due to regulatory mandates as well as strategic planning and long-term business goals (Katsoulakos, 2004). Corporate entities increasingly consider how such expenditures would affect their stakeholders and society as a whole rather than just doing them with the purpose of doing good (De, 2018). The idea of CSR holds that businesses have moral obligations to society beyond their fiduciary duties to shareholders or investors. (Weinstein, 2020).

Earlier corporates only paid attention on metropolitan areas, but now have gradually turned their attention to rural communities. Therefore, the primary goal of this study is to provide a comprehensive overview of the numerous CSR, ESG and sustainability initiatives in rural areas. (Du, Akremi, & Jia, 2022).

The article comprises of the following sections: The first portion presents a brief overview of the topic, while the second includes a framework for CSR, ESG, and sustainability initiatives in rural areas, as well as an explanation of bibliometric research and a literature review. The research technique is described in detail in the third section, which is followed by the fourth section, which shows the statistical results from VOSviewer. The last section gives a conclusion and possible future study directions in the domain of CSR and ESG activities in rural areas.

## **2. Background of the study**

### **i. Bibliometric Methods**

Bibliometric study helps in meta-analysis, reviewing the literature systematically by finding some trends and conclusions from the research done in a particular field and reviewing scientific production as well (Donthu, Kumar, Mukherjee, Pandey, & Lim, 2021). Whenever large amount of research is done in a particular field it creates a load of data which needs to be studied scientifically in order to derive some findings or impact. Bibliometric methods give a bird's eye view of a particular field and lets the researcher analyze research filed from different perspectives as long as there are connections between the analyzed studies (Zupic, 2015).

### **ii. Corporate Social Responsibility (CSR), Environmental, Social, and Governance (ESG) and Sustainability**

The phrase "Corporate Social Responsibility" (CSR) was first used in 1926. Companies made it with the intention of bettering the society in which they are conducting their prosperous businesses (Schmeltz, 2012). CSR is a broad and inclusive definition of business engagement that encompasses a variety of elements including all pertinent stakeholders and constituent groups that have a continuing stake in the organization's operations as well as the larger community in which it works (Selarka, 2016).

In assessing the sustainability and moral impact of investments and corporate activities, Environmental, Social, and Governance (ESG) standards have become crucial. ESG refers to a

variety of non-financial performance measures that are used to evaluate how a firm maintains its governance procedures, social responsibilities, and environmental effect (Murphy, 2013).

Both CSR and sustainable development are equally important and are inter-dependent. CSR is a tool for the nation's sustainable development, and sustainable development would be insufficient without it. (Gujrati, 2017). Businesses frequently participate in a variety of CSR activities that promise a range of societal advantages (Barnett, 2020).

**Figure 1: CSR, ESG and Sustainability Word Cloud**



**Source:** (DeSantis Breindel, 2023)

### iii. Rural Area

Mahatma Gandhi stated “India lives in its villages”. Any country can develop in real sense only if its rural areas are developed along with the urban areas. Although most significant transactions always take place in cities, around 70% of the world's poorest people still live in rural areas, making up nearly half of the world's population (Dasgupta, et al., 2014). Organizations are today more aware than ever before of the need of corporate social responsibility in carrying out their obligations to their workers, clients, suppliers, and the community at large. (Deavers, 1992).

### 3. Research Methodology

The Scopus database provided the data for this study, which covered the years 1973 through June 2023. The final article from journals and trade journals has been taken into consideration. The analysis was done using VOSviewer software after all the data was exported in CSV format. The “title”, “abstract”, and “keywords” default search fields in the Scopus database were used for the search. 438 documents were initially found; however, the list was reduced to 371 articles using a variety of exclusion and inclusion criteria. This study contributes significantly to the particular research area by asking the following research questions (RQs):

**RQ1:** What are the recent areas of funding used by companies for CSR or ESG spending in rural areas?

**RQ2:** Which journals are preferred by researchers for publications on CSR, ESG or sustainability activities in rural areas?

**RQ3:** Which are the countries or organizations or authors that are most productive in the publications in CSR, ESG or sustainability activities with respect to the rural area?

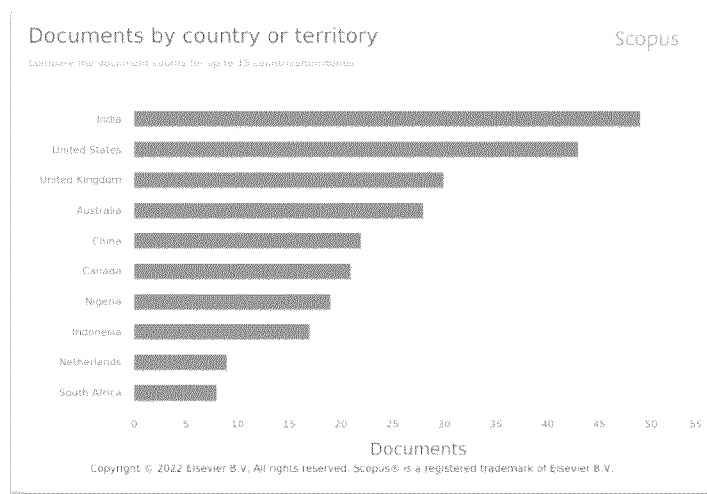
**Results and discussion**

**a. Documents by country**

The variety of nations that have contributed to the field of study under examination is depicted in Figure 2. With 49 papers, or roughly 15.12% of all publications in this field of study, India has the most publications with respect to this particular study topic. With 43 articles, or 13.27% of all publications, the United States has a sizable presence.

Australia and the United Kingdom go on to publish 30 and 28, respectively, making significant contributions to this field of study. These numbers correspond to about 9.26% and 8.64% of all publications, respectively. With 22, 21, 19, and 17 publications, respectively, China, Canada, Nigeria, and Indonesia are listed in that order. The rate of research in this area is currently gradually picking up in the regions of South Africa and the Netherlands.

**Figure 2: Documents by country or territory**



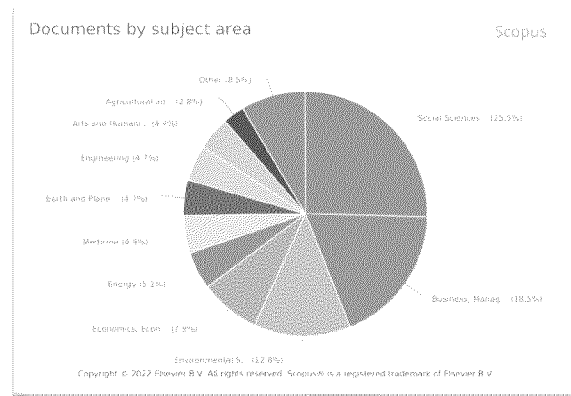
**b. Documents by subject area**

According to their subject area or particular study focus, the publications on CSR, ESG, and sustainability activities in rural areas are distributed in Figure 3 as a pie chart. With 25.5% of

all publications in this field of study, the discipline of social sciences had the highest share. Around 18.5% of the total articles were in the business and management field of research. Third on this list, with 12.8% of all articles, is environmental studies. Following that is Economics, which comprises roughly 7.9% of the total number of publications in this topic.

Energy, Medicine, Earth and Planets, Engineering, and Arts and Humanities are only a few of the disciplines that make up the research field.

**Figure 3: Documents by subject area**

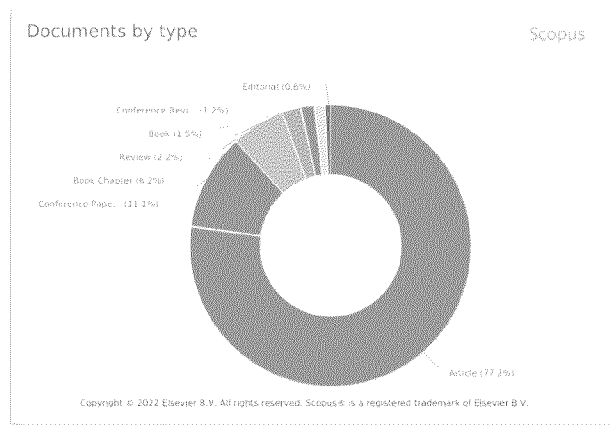


**c. Documents by type**

The many categories of publications that have been published in relation to CSR, ESG, and sustainability activities in rural areas are shown in Figure 4. The pie chart shows that research articles are the most common type of publications in this field of study (77.2%).

11.1% of all publications in this particular field of study are conference papers. Book Chapters are ranked third in the aforementioned rating with 6.2%.

**Figure 4: Documents by type**

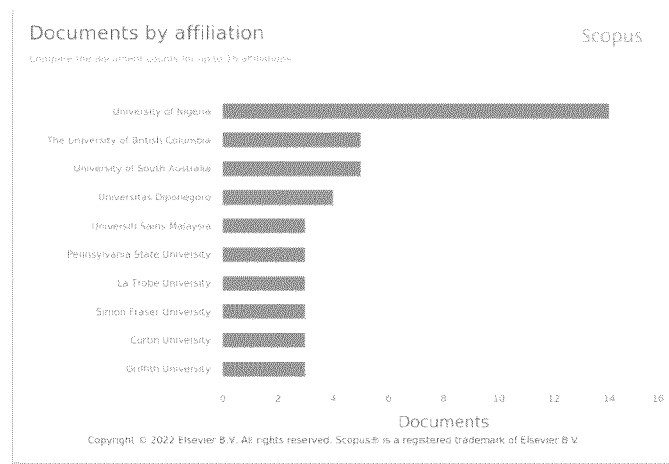


#### vi. Documents by affiliation

According to the volume of publications linked to papers in the stated research area, Figure 5 shows the ranking of the top 10 colleges. The University of Nigeria has the most publications in this particular area of study, with a total of 14.

The University of South Australia and The University of British Columbia have since each contributed five articles to the aforementioned field of study. The next organization on the list is Universitas Diponegoro, which has four publications connected to it. Universiti Sains Malaysia, Pennsylvania State University, La Trobe University, Simon Fraser University, Curtin University, and Griffith University are the next six institutions on the list.

**Figure 5: Documents by affiliation**



#### 5. Conclusion:

By selecting and analyzing the most recent and pertinent articles published in this field of study, the current study adds to the body of knowledge by providing information on the state of the art and highlighting trends, gaps, and areas for future research (Cavalcante, Coelho, & Bairrada, 2021). However, research on CSR, ESG and Sustainability spending in rural areas is still in its infancy. From the bibliometric review study mentioned above, following crucial findings can be drawn:

Firstly, after 2010, studies on this subject quickly become more pertinent. India has the most publications in this field, 15.12% of all those made worldwide. With 13.27% of the total in this discipline, the US comes in second. The UK and Australia come in second with 9.26% and

8.64% of the total, respectively. Followed by China, Canada, Nigeria, and Indonesia at 6.79%, 6.48%, 5.86%, and 5.25%.

Further, 25.5% of all research was published in the social sciences. Research on business and management made up 18.5% of the publications. Next with 12.8% is environmental studies. Following that is Economics, which comprises 7.9% of papers in this area.

Lastly, there are a number of areas that need more focus from businesses, including CSR or ESG investments in agriculture, women's empowerment, financial education, industrial advancement, and related initiatives. By giving these areas priority, society as a whole will gain from sustainable advancement in addition to rural areas and their residents experiencing development.

**Figure 6: Integration between CSR, Sustainability and ESG**



## References

- Barnett, M. H. (2020). Beyond Good Intentions: Designing CSR Initiatives for Greater Social Impact. *Journal of Management*, 1-28.
- Cavalcante, W., Coelho, A., & Bairrada, C. (2021). Sustainability and Tourism Marketing: A Bibliometric Analysis of Publications between 1997 and 2020 Using VOSviewer Software. *Sustainability*, 13, 4987.
- Dasgupta, P., Morton, J., Karapinar, B., Meza, F., Rivera-Ferre, M., & Vincent, K. (2014). Rural Areas.
- De, C. R. (2018). *A Practical Guide to Corporate Social Responsibility Law, Accounting and Taxation Aspects*. New Delhi: Bloomsbury.
- Deavers, K. (1992). What is rural? *Policy Studies Journal*, 20(2), 183.

- DeSantis Breindel. (2023, August 23). The Language of CSR: What Your Words Say About Your Company. Retrieved from <https://www.desantisbreindel.com/>: <https://www.desantisbreindel.com/insights/the-language-of-csr/>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *J. Bus. Res.*, 133, 285–296.
- Du, S., Akremi, A., & Jia, M. (2022). Quantitative research on Corporate Social Responsibility: A quest for relevance and rigor in a quicklu evolving, turbulent world. *Journal of Business Ethics*.
- Gujrati, P. &. (2017). Corporate Social Responsibility and Sustainable Issues in India: An Analysis. *Advances in Agri-Management*, 209-221.
- Katsoulakos, D. P. (2004). A CSR oriented Business Management Framework. Athens: INLECOM.
- Murphy, D., & McGrath, D. (2013). ESG Reporting - class actions, deterrence, and avoidance. *Sustain Account Manag Pol J*, 4: 216-235.
- Schmeltz, L. (2012). Consumer-oriented CSR communication: Focusing on ability or morality? *Corp. Commun. Int. J.*, 17, 29–49.
- Selarka, S. N. (2016). *Corporate Governance and Corporate Social Responsibility of Indian Companies*. Singapore: Springer Science+Business Media.
- Weinstein, L. (2020, Nov). Corporate Social Responsibility (CSR): A Resource Guide. Retrieved from Library of Congress: <https://guides.loc.gov/corporate-social-responsibility>
- Zupic, I. &. (2015). Bibliometric Methods in Management and Organization. *Organ. Res. Methods*, 18, 429–472.



## 4. A Study of Factors Influencing Male Consumers' buying behaviour towards Men's Lifestyle Apparel

**Ms. Sonam V. Singh**

Lecturer, M.Com Course Co-Ordinator, R. A. Podar College  
of Commerce and Economics (Autonomous), Matunga.

**Dr. Mrs. Rashmi M. Agnihotri**

Associate Professor, HOD of Commerce Department, K. G. Joshi College of Arts  
and N. G. Bedekar College of Commerce (Autonomous), Thane.

### Abstract

Factors influencing male consumers' buying behaviour towards men's lifestyle apparel are of paramount importance for retailers and marketers. These factors encompass a wide range of considerations, including individual preferences, fashion trends, brand reputation, quality, price, comfort, and social influences. Understanding and effectively addressing these factors can significantly impact purchasing decisions in the competitive men's fashion market. Marketers must align their product offerings, marketing strategies, and customer experiences with these influences to cater to male consumers' diverse needs and desires, fostering brand loyalty and driving sales in the rapidly evolving landscape of men's lifestyle apparel. Research is based on primary data. Information was collected from 120 male respondents.

**Keywords:** Buying Behaviour, Male Consumer, Lifestyle apparel, Influencing Factor.

### Introduction

Numerous elements, including psychological, social, and economic considerations, impact the purchasing decisions made by male consumers regarding men's lifestyle wear. These considerations can be loosely grouped into three categories.

Regarding lifestyle gear, various psychological aspects significantly influence male consumers' preferences. The most important drivers are individuals' preferences, attitudes, and perceptions. When it comes to men's apparel, for instance, a person's sense of style, need for self-expression, and desire for comfort are all factors that impact their wardrobe selections. The psychological elements include things like a man's self-esteem and body image because these things can affect the clothes a man feels secure wearing and the clothes he chooses to buy.

Another significant aspect that plays a role in determining male consumers' purchasing behavior is social variables. Peer pressure, social standards, and cultural influences can shape their preferences. Dressing in a way that is congruent with one's social identity and the expectations of one's peer group is something that many men strive to achieve. For instance, someone might opt to dress in a way that enables them to blend in with a particular subculture or stick to a particular set of fashion trends. A man's purchasing decisions can also be influenced by celebrity endorsements and how fashion is portrayed in the media.

Men with larger salaries that they can spend on lifestyle clothes may be more inclined to invest in premium and luxury brands. In contrast, men who are on a limited budget may place a higher priority on affordable options. In addition, the perceived value of an object, which might include aspects such as its quality and durability, can significantly impact purchase judgments. Men are always looking for ways to get the most out of their money; therefore, they are especially susceptible to being influenced by sales, discounts, and other forms of promotion.

Furthermore, technical developments and the rise of e-commerce have completely revolutionized the retail scene. As a result of these changes, online evaluations, product descriptions, and the simplicity of purchase have become key variables that impact male consumers' decisions. Additionally, important aspects to consider are ease of use and the accessibility of several payment methods.

In a nutshell, the purchasing decisions that male consumers make about men's lifestyle items are influenced by an intricate interaction of psychological, social, and economic elements. When firms and marketers understand these effects better, they can better adjust their products and marketing methods to effectively target and engage a certain population.

### **Review of Literature**

1. **Nair, V. K. (2019)**, In the research titled "Consumer Buying Behaviour in Fashion Retailing: An Empirical Study on Men's Fashion apparels," According to the study, age, income level, and frequency of garment purchases are significantly related, but marital status, qualification, and frequency are not. In the illustrates that age and income affect client buying behaviour. Customers have different opinions on price, place, and marketing; therefore, manufacturers and consumers must work together to create momentum and permanent change. The in-store experience is crucial since bored

customers use their phones and lose touch with the business. They may find lesser pricing on their phones or decide not to buy.

2. **Banerjee, S., & Banerjee, T. (2019)**, In the research titled “An Analytical Study on the Men’s Denim Wear Market in India: Identification of the Key Factors Influencing the Consumer Buying Behaviour in the Economy Segment,” the study examined the denim wear market in India and the factors that influence consumer purchases. Denim, unlike other clothing, is exposed to wear and tear and is supposed to endure over time. A factor analysis revealed that consumers are influenced by product quality, innovation, variety, style, durability, peer influence, availability, and confidence when purchasing in this category. The price of denim jeans is influenced by the consumer’s age and family income, but the cut of the jeans does not affect the price.
3. **Zietsman, L. (2006)** In the research titled “Profiling Male Apparel Consumers: Demographic Characteristics, Lifestyle, Shopping Orientation, Patronage Behaviour, and Shopping Mall Behaviour by Promoters,” gaining knowledge of essential variables in the extended conceptual framework (see Section 1.3) was crucial in South Africa’s complex marketing environment and developing the male clothing market. Despite their growing share of apparel spending, a limited study exists on male garment consumer behaviour. To effectively target the male apparel market and suit various needs, merchants must understand the impact of crucial elements.

### Data Analysis

#### Objective-1: To identify the purchase preference according to type of men’s apparel

The information collected about purchase preference by the respondents towards category of apparel. The information is classified and presented in the following table:

Sr.no		Never	Sometimes	Mostly
7.1	Formal Wear	33	58	29
7.2	Casual Wear	1	15	104
7.3	Sports Wear	32	65	23
7.4	Ethnic Wear	45	71	4
7.5	Others	48	53	19

The provided data represents the frequency of responses for "Casual Wear" stands out as the most frequently worn category, with a majority of respondents indicating that they wear it

"Mostly" (104 individuals) and some wear it "Sometimes" (15 individuals), making it the most preferred and versatile category for regular use. On the other hand, "Ethnic Wear" appears to be worn less frequently, with a significant number of respondents indicating that they wear it "Never" (45 individuals) or "Sometimes" (71 individuals), suggesting that it may be reserved for specific occasions rather than everyday wear.

"Formal Wear" and "Sports Wear" fall in between, with a mix of responses, including "Sometimes" and "Mostly," indicating that these categories are worn on both a regular and occasional basis, but neither of them is as universally favoured as Casual Wear. "Others" category, which likely includes a variety of clothing types, also shows a mix of responses, with some individuals wearing it "Mostly" (19 individuals) but a considerable number wearing it "Sometimes" (53 individuals) and "Never" (48 individuals).

**Null Hypothesis  $H_{01}$ :** There is no preference for particular type of wear by the respondents.

**Alternate Hypothesis  $H_{11}$ :** There is a preference for particular type of wear by the respondents.

To test the above null hypothesis Friedman test is applied and results are as follows:

<b>Test Statistics<sup>a</sup></b>	
N	120
Chi-Square	177.423
df	4
P-value	.000
a. Friedman Test	

**Interpretation:** Above results indicates that the calculated p-value is 0.000. It is less than 0.05. Therefore, the Friedman test is rejected. Hence null hypothesis is rejected and the alternate hypothesis is accepted.

**Conclusion:** There is a preference for particular type of wear by the respondents.

**Findings:** To understand the finding the following rank table is obtained.

<b>Ranks</b>	
	Mean Rank
Formal Wear	2.93
Casual Wear	4.46

Sports Wear	2.83
Ethnic wear	2.28
Others	2.50

The provided data represents the mean ranks assigned to different clothing categories, indicating the respondents' relative preferences. Casual Wear has the highest mean rank of 4.46, suggesting it is the most preferred category among the respondents. Sports Wear follows closely with a mean rank of 2.83, indicating a significant preference as well. Ethnic Wear and Others have lower mean ranks of 2.28 and 2.50, respectively, indicating moderate preferences. Interestingly, Formal Wear has the lowest mean rank of 2.93, implying it is the least preferred category among the respondents. This trend suggests that individuals surveyed have a stronger inclination towards Casual Wear and Sports Wear, while Formal Wear is less favoured in comparison, and Ethnic Wear and Others fall somewhere in between in terms of preference.

**Objective-2: To identify the influencing factor towards online shopping for men's apparel.**

The information collected about influencing factor towards online shopping by the respondents. The information is categorized in “Convenience”, “ User Interface (UI)”, “Time-Saving”, and “Information & Payment Security” and presented in the following table:

Sr. no.		Strongly Disagree	Strongly Disagree	Strongly Disagree	Strongly Disagree	Strongly Disagree
<b>Convenience</b>						
8.1	Ease of accessibility	6	2	22	33	57
8.2	24/7 availability	6	1	18	28	67
8.3	Choice and product range	9	4	35	35	37
8.4	On-time delivery	8	4	38	42	28
<b>User Interface (UI)</b>						
8.5	Layout facilitates product selection	8	12	44	45	11
8.6	Ease of navigation	2	6	30	63	19
<b>Time-Saving</b>						
8.7	Store visit time saved	3	11	23	42	41
8.8	Shopping	6	14	24	40	36

	becomes faster					
<b>Information &amp; Payment Security</b>						
8.9	Need of secured platforms	3	10	39	34	34
8.10	Need of various modes of payment	9	6	34	37	34

**Null Hypothesis H<sub>02</sub>:** There is no particular influencing factor towards online shopping of the men's Apparel.

**Alternate Hypothesis H<sub>12</sub>:** There is a particular influencing factor towards online shopping of the men's Apparel.

To test the above null hypothesis Friedman test is applied and results are as follows:

<b>Test Statistics<sup>a</sup></b>	
N	120
Chi-Square	37.775
df	3
p-value	.000
a. Friedman Test	

**Interpretation:** Above results indicates that the calculated p-value is 0.000. It is less than 0.05. Therefore, the Friedman test is rejected. Hence null hypothesis is rejected and the alternate hypothesis is accepted.

**Conclusion:** There is a particular influencing factor towards online shopping of the men's Apparel.

**Findings:** To understand the finding the following rank table is obtained.

<b>Ranks</b>	
	Mean Rank
Convenience	2.89
User Interface	2.02
Time Saving	2.58
Information & Payment Security	2.51

The mean rank represents the average ranking of four different factors, namely Convenience (ranked at 2.89), User Interface (ranked at 2.02), Time Saving (ranked at 2.58), and Information & Payment Security (ranked at 2.51). A lower mean rank indicates a higher level of preference or importance assigned to that factor. In this context, User Interface appears to be the

most valued aspect, as it has the lowest mean rank at 2.02, suggesting that users prioritize a user-friendly interface in their evaluations, while Convenience, Time Saving, and Information & Payment Security are also important but are ranked slightly lower on average.

**Null Hypothesis H<sub>03</sub>:** There is no influencing of promotional offers towards men's Apparel.

**Alternate Hypothesis H<sub>13</sub>:** There is an influencing of promotional offers towards men's Apparel.

To test the above null hypothesis Friedman test is applied and results are as follows:

Test Statistics <sup>a</sup>	
N	120
Chi-Square	113.401
df	6
P-value	.000
a. Friedman Test	

**Interpretation:** Above results indicates that the calculated p-value is 0.000. It is less than 0.05. Therefore, the Friedman test is rejected. Hence null hypothesis is rejected and the alternate hypothesis is accepted.

**Conclusion:** There is an influencing of promotional offers towards men's Apparel.

**Findings:** To understand the finding the following rank table is obtained.

Ranks	
	Mean Rank
Buy one - pay later	4.14
One day delivery	5.04
Subscribe & save	4.20
Renting clothes	2.88
High Customization	3.85
Free Alteration Home visit of stylist	3.85
Chatbots	4.05

The provided data presents mean ranks assigned to various shopping-related features or services. These mean ranks offer insights into the relative preferences of respondents regarding these shopping-related options. "Renting clothes" has the lowest mean rank of 2.88, indicating

that it is the most preferred option among the respondents. This suggests that a significant portion of the surveyed individuals values the idea of renting clothes as a sustainable and cost-effective alternative to purchasing.

"High Customization" and "Free Alteration Home visit of stylist" share the same mean rank of 3.85, indicating a moderate preference level for these services. This suggests that respondents appreciate the option for customized clothing and the convenience of stylist home visits for alterations. "Buy one - pay later," "Subscribe & save," and "Chatbots" have mean ranks ranging from 4.05 to 4.20. Respondents moderately prefer these features, indicating they are interested in options like delayed payments, subscription-based savings, and chatbot assistance in their shopping experiences. "One-day delivery" has the highest mean rank of 5.04, indicating that it is the least preferred option among the surveyed individuals. While fast delivery is important to some extent, it appears to be less of a priority than the other options presented.

### **Bibliography**

1. Nair, V. K. (2019). Consumer Buying Behaviour in Fashion Retailing: An Empirical Study on Men's Fashion Apparels Seventeenth AIMS International Conference on Management, 1202–1208.
2. Banerjee, S., & Banerjee, T. (2019). An Analytical Study on the Men's Denim Wear Market in India: Identification of the Key Factors Influencing Consumer Buying Behaviour in the Economy Segment *Amity Journal of Marketing*, 4(1), 46–63.
3. Zietsman, L. (2006). Profiling Male Apparel Consumers: Demographic Characteristics, Lifestyle, Shopping Orientation, Patronage Behaviour, and Shopping Mall Behaviour Promoters: Prof. Em Visser and Mrs. Me Van Der Merwe April 2006. April.
4. For, C., & Planning, F. (2016) Study of Consumer Buying Behaviour for National and Private Brands in the Men's Apparel Category Study of Consumer Buying Behaviour for National and Private Brands in the Men's Apparel Category Md. Chand Rashid June 2021.
5. Charan, A., & Dahiya, R. (2015). Digital Marketing and Consumer Behaviour: An Empirical Study in the Indian Car Market with Special Reference to Delhi and NCR *ANVESHAK, International Journal of Management*, 4(2), 60. <https://doi.org/10.15410/aijm/2015/v4i2/67718>



6. Banytė, J., Rūtelionė, A., & Jarusevičiūtė, A. (2015). Modeling Male Shoppers Behaviour in a Shopping Orientation Context *Procedia: Social and Behavioural Sciences*, 213 (1993), 694–701. <https://doi.org/10.1016/j.sbspro.2015.11.489>
7. Dhiman, R., Chand, P. K., & Gupta, S. (2018). Behavioural Aspects Influencing Decision to Purchase Apparel amongst Young Indian Consumers *FIIB Business Review*, 7(3), 188–200. <https://doi.org/10.1177/2319714518790308>
8. Bhakat, R. S., & Muruganatham, G. (2013). A Review of Impulse Buying Behaviour *International Journal of Marketing Studies*, 5(3) <https://doi.org/10.5539/ijms.v5n3p149>
9. Thamthada, W., & Punnakitikashem, P. (2015). Exploring Thai Men's Shopping Behaviour for Clothing and Fashion Products 46–59. <https://www.semanticscholar.org/paper/Exploring-Thai-Men-Shopping-Behaviour-for-Clothing-Thamthada-Punnakitikasem/a4abd68500d135b16d020161ab84deb35d898edc>
10. Rahman, O., & Navarro, H. D. (2022). Men's Physical Stature: Tackling Heightism and Challenges in Fashion Consumption *Behavioural Sciences*, 12(8) <https://doi.org/10.3390/bs12080270>
11. Strubel, J., & Petrie, T. A. (2018). Perfect bodies: The relation of gay men's body image to their appearance enhancement product consumption behaviours *Journal of Fashion Marketing and Management (Vol. 22, Issue 1)*. <https://doi.org/10.1108/JFMM-05-2017-0040>
12. Exploring how social media platforms influence fashion consumer decisions in the UK retail sector. (n.d).
13. Mitchell, V.-W., & Walsh, G. (2004). Gender differences in German consumer decision-making styles *Journal of Consumer Behaviour*, 3(4), 331–346. <https://doi.org/10.1002/cb.146>

## 5. Changing Paradigm of Health Insurance in India Amid Technological and AI Revolution

**CS Charul Y. Patel**

Assistant Professor, Department of Accountancy, SIES College of Commerce & Economics,  
Sion (East), Mumbai.

**Dr. Varsha Ganatra**

Head & Associate Professor, Department of Commerce, Vivekanand Education Society's  
College of Arts, Science & Commerce (Autonomous), Mumbai.

---

### Abstract

Prioritizing and maintaining good health through a balanced life, preventive healthcare, and timely medical attention is essential for leading a fulfilling and meaningful life. Health insurance safeguards finances and provides access to the best healthcare so that individuals are able to receive needed treatment without burdening themselves with heavy expenses. This in turn ensures they are physically, mentally, and financially healthy. There is no doubt that health insurance has become a necessity in today's era. The revolution on account of technological innovations and the use of artificial intelligence is driving the entire world crazy. The Indian health insurance sector is no exception and has been characterised by several path-breaking ideas and applications of technological advancements and AI.

This paper aims to review some of the important technological advancements and uses of AI that are reshaping and changing the paradigm of the Health Insurance sector in India.

**Keywords:** Health insurance, technological, AI, revolution, India.

### Introduction

Several health issues are on the rise now not only in India but globally too. The prevalence and precedence of these health problems might also change through the years, and new issues might also emerge. However, the reality remains that modern-day fast-paced life is posing severe threats to human health.

The COVID-19 pandemic turned into a major worldwide health crisis, leading to considerable infection, dying, and healthcare challenges. While vaccines and public health measures were supporting to govern the spread, variations of the virus and vaccination efforts remained areas of problem. Amidst the rising health threats, inflation is another major issue

affecting the quality of life worldwide. The rising cost of medical treatments is a major threat to the mental peace and security of the people.

In this scenario, the only saviour which provides a sigh of relief is health insurance. Health insurance provides monetary safety, access to healthcare services, and thereby peace of mind. Health insurance acts as a shield that protects an individual against economic losses because of heavy medical expenses. However, it was the cumbersome and lengthy processes that had complicated the process of getting health insurance. The advent and use of technology and AI in the field of insurance has been a masterstroke and has changed the scenario completely. It has smoothened the processes and made buying insurance as easy as buying a cup of tea.

### **Rationale for the study**

The technological and AI revolution involves the rapid advancements in technology and artificial intelligence that are transforming industries, enhancing automation, improving efficiency, and revolutionizing our lives 360 degrees by changing our lives and the way we do our routine activities at home as well as at the workplace. The health insurance sector is no exception and has experienced tremendous shifts and path-breaking novelties on account of technological advancements.

The evolution of health insurance in India has been remarkable. From a negligible demand initially to the growing consciousness on account of healthcare uncertainties has fuelled a surge in demand for health insurance coverage. This demand spike has brought about a sizeable growth in the health insurance sector along with the wide variety of insurers coming with a wide variety of health insurance products into the Indian marketplace. This has led to fostering healthy competition and innovation in the health insurance segment. The evolving panorama has not only most effectively benefited people in search of economic safety and mental peace against enormous medical charges but has also broadened the implications for the healthcare enterprise and the overall general economic system.

The COVID-19 pandemic also played a role not only in the increased demand for health insurance we are seeing now but also in the technological advancements and innovations witnessed. The COVID-19 pandemic has left an enduring impact on the minds of the people and has pushed and furthered the growth of the health insurance sector in India.

### **Objectives of the study**

1. To study and review the technology and AI-driven revolution in the health insurance sector in India.
2. To study and review some of the prominent and pioneer Insurtech Companies in India.

### Research Methodology of the study

The research paper is based on the Secondary study. The secondary data was collected from blogs, online journals, online newspapers, online periodicals, and the internet via important websites.

### Results of the study and discussion

All over the World, health insurance companies have rapidly adopted new technologies, making things more convenient and efficient. However, in India, the use of technology in the field had been a bit slow and cautious, but the times and things are changing now. The way technology is being used in India's health insurance in recent times, especially after Covid-19 is quite different from how it had been progressing a few years back. There is widespread use of technology and AI in almost all of the systems and processes of the health insurance sector.

#### 1. Technology and AI-driven revolution in the health insurance sector in India

The use of Technology and AI in streamlining various processes, systems and administration of the health insurance sector has increased leading to the improvement of various aspects of the industry by making them easier, faster and more accurate. Some of the path-breaking and important Technology and AI-driven revolution and its positive effect on the health insurance sector in India are discussed below:

**a. Machine learning algorithms** are used to verify and assess the eligibility of insurance, and policy details, and review claims, to reduce the risk of fraudulent claims.

**b. AI-driven underwriting models** use data analytics to assess an individual's risk profile more accurately. This allows insurers to offer personalized policies and pricing based on the applicant's health history and lifestyle.

**c. Chatbots and virtual assistants** powered by AI provide 24/7 customer support. They can answer policy-related queries, assist with claim submissions, and provide general information, improving overall customer experience.

**d. Digitization of Records is done by the** health insurance companies by digitizing policy documents, medical records, and claim forms. This reduces paperwork, speeds up processes, and enhances data security.

**e. Predictive Analytics is done by using** AI and data analytics to predict healthcare trends and cost patterns. Insurers can identify high-risk individuals and proactively offer them wellness programs and preventive care to mitigate future claims.

**f. Telemedicine Integration is done whereby** Health insurance providers often integrate telemedicine services into their policies, making it easier for policyholders to access medical consultations and advice remotely.

**g. Wellness Programs are promoted by** Insurers using technology to encourage policyholders to adopt healthier lifestyles. This may include mobile apps that track fitness activities, offer dietary advice, and provide incentives for achieving health goals.

**h. Data management and Risk Assessment by AI** which can analyse vast amounts of health data to identify emerging health risks and trends. Insurers can then adjust their offerings and premiums accordingly.

**i. Data Security is also taken care of as** the healthcare industry deals with sensitive personal data, AI and technology are used to enhance data security, ensuring that policyholders' information remains confidential and protected from cyber threats.

**j. Personalized Policies are being offered by the** Insurers by using AI to create tailor-made policies to suit to an individual's health needs and preferences. This includes options for specific disease coverage or maternity benefits.

**k. Robotic Process Automation (RPA)** has automated the tedious day-to-day workflow of the Insurance Industry. This has resulted in reducing the workload and cost of operations and thereby improved customer satisfaction.

**l. Blockchain technology** has resulted in a radical change in the health insurance industry through increasing transparency and outcomes across the entire value chain.

**m. Claims Settlement by** Automation and AI streamline the claims settlement process, reducing the time it takes to process and approve claims, which benefits policyholders during medical emergencies.

These technological and AI advancements aim to make the industry more efficient, customer-friendly, and responsive to the evolving healthcare landscape. They also help insurers manage risks more effectively and improve the overall quality of healthcare services provided to policyholders. The result of this massive automation of the internal systems and processes driven by technology and AI has enhanced the visibility and efficiency into the overall business procedure.

## **2. Pioneer and Prominent Insurtech Companies in India**

Insurtech, is derived from a combination of two words "insurance" and "technology," and is used to refer to the companies that leverage technology and innovation to disrupt and improve various aspects of the insurance industry. The Insurtech companies in India, aim to make

insurance more accessible, affordable, user-friendly. accessible, efficient, and customer-centric by introducing new and tailored insurance products to meet evolving consumer needs. This sector is a dynamic one and is continually evolving as it adapts to changes in technology, customer preferences, and regulatory developments.

**a. PolicyBazaar :** PolicyBazar started in India in 2008 is the oldest aggregator and that has evolved over the years to become one of the leading insurtech companies. It is like everything about insurance in one place one stop. It has played a major and pioneer role in spreading and promoting awareness and accessibility for insurance in India. The highlight of PolicyBazar is its user-friendly platform and extensive range of insurance offerings making it a popular choice.

**b. InsuranceDekho :** Started in 2016, InsuranceDekho is one of the many notable insurtech that has created a space for itself by offering a wide range of one-stop insurance-related services and solutions. It provides a comprehensive online platform for consumers to compare and purchase from a variety of insurance products. InsuranceDekho is one of the leading promoters of digitization and simplification of insurance in India. It has gained popularity and carved a name for itself through its continuous commitment to customer education, and transparency.

**c. Go Digit Insurance :** Go Digit Insurance is a prominent digital and insurtech company that started in India in 2017. It has made a mark by prioritizing online platforms and mobile apps to make the insurance buying process simple, convenient, and accessible for customers. Go Digit Insurance has gained popularity in the Indian insurance market on account of its customer-focused approach, simplified insurance products, and efficient use of technology. It continues to innovate and expand its product offerings to meet the evolving needs of policyholders in India.

**d. Acko General Insurance:** Acko General Insurance is one of the prominent insurtech companies started in 2017 in India which has carved a niche for its innovative approach to insurance. Acko operates primarily via an online platform and mobile app. The digital approach allows customers to do all the tasks digitally online from purchasing to managing and filing claims for insurance policies very easily and conveniently. Acko continues to adapt to changes and evolve to meet the growing needs of Indian consumers.

**e. Pazcare :** Established in the year 2020, Pazcare is one of the new-age and latest Insurtech companies. The highlight of this company is the ease with which the employees can download the Paz App and can access their policies, see the inclusions as well as exclusions of the policy, get access to the network hospitals, put up claims, and a number of things by just

using the Paz App. Pazcare has its own AI & tech-enabled easy-to-use dashboard where the HR department of the companies can easily administer their group insurance. It is on the way to transforming itself into the best Group insurance company for the modern Indian workforce.

**f. Paytm Insurance :** In September 2021, Paytm, one of India's prominent fintech companies jumped into the insurance sector as one of the latest insurtech companies offering various insurance products and services on its platform. It is also an insurance aggregator that facilitates users to compare and purchase insurance policies from any of the several insurance companies it has partnered with. Its prominent feature is the Digital Platform that it sets up for convenient use, just browse, compare and select insurance policies.

The concepts of insurance aggregators and insurtech companies are related but not the same. They serve different roles within the insurance industry, although there can be some overlapping in their activities and services. The primary distinction between the two is that while the insurance aggregators primarily aim to provide a space for the comparison and distribution of insurance policies from multiple insurance companies, the insurtech companies are more broadly involved in transforming the insurance industry through technology and innovation. It should be noted that there are some insurtech companies that also offer aggregation services as part of their broader portfolio of solutions. Insurtech is a wider term describing a type of insurance provider, while aggregators are merely service-providing sources that facilitate the sale of insurance.

To summarize, insurance aggregators are a subset of insurtech companies who may also use technology and AI to enhance and provide better services, their main focus would remain the aggregation and distribution of insurance policies. On the other hand, insurtech companies encompass a wider and broader objective of leveraging technology to innovate and transform various aspects of the insurance industry and are more dynamic.

### **Challenges and Suggestions**

Insurtech companies operating in the health insurance sector face several challenges such as issues of Data Privacy and Security for Handling sensitive health data, Data Quality and Accuracy, Accurate Pricing and Risk Assessment models, Regulatory Compliance, Integration with Healthcare Systems: Fraud Prevention, sustaining the inflation in healthcare sector, Customer awareness and Education, building consumer trust, surviving cut-throat Competition, and Customer Retention.

These challenges can be overcome by adopting an approach that is a combination of technological innovation with adequate precautions, regulatory compliance, customer-centricism approaches, and industry partnerships.

Therefore, to be successful and survive in the long term these insurtech companies in the health insurance sector must adapt to changing dynamics and continue to provide value to policyholders while meeting industry standards and regulations.

### **Conclusion**

The combination of the digital revolution and the rise of insure-tech and health-tech companies in India's health insurance industry is experiencing an enormous change. This mix of factors is likely to push the health insurance industry in India into a new phase of significant growth and a focus on making things better for customers. The technology-driven digitization in the overall health ecosystem in India has grown leaps and bounds which has led to streamlining of the processes, reducing the administrative burdens and enhancing the overall customer experience and satisfaction. This is here to stay and improve further in the coming times with the competition getting tougher and tougher.

### **References**

1. Bfsi, E. (2022, April 4). Innovations that transformed the insurance landscape in India. *ETBFSI.com*. <https://bfsi.economictimes.indiatimes.com/blog/innovations-that-transformed-the-insurance-landscape-in-india/90587085>
2. Ganguly, S. (2023, August). Revolutionizing Indian Health Insurance Sector Through Technology & Regulatory Innovations. *The Logical Indian*. Retrieved October 1, 2023, from <https://thelogicalindian.com/finance/the-future-of-health-insurance-innovations-trends-and-changing-landscape-41080>
3. Parekh, A., & Parekh, A. (2023, March 20). Future of health insurance in digital health age: An Indian perspective. *Firstpost*. <https://www.firstpost.com/health/future-of-health-insurance-in-digital-health-age-an-indian-perspective-12319062.html>
4. Pazcare. (2023, May 28). Top 10 Insurtech Companies in India Revolutionizing the Insurance Industry. *Group Health Insurance*. Retrieved October 1, 2023, from <https://www.pazcare.com/blog/insurtech-companies-in-india>
5. The Indian Express Private Limited. (2023). Technological advancement in health insurance services. *Express Healthcare*. <https://www.expresshealthcare.in/news/technological-advancement-in-health-insurance-services/440549/>



## 6. GST Implementation in India: An In-Depth Analysis of Economic Impact through Secondary Data Examination

**Dr. Ravindra Nagesh Naik**

I/C Principal and Associate Professor, Ramanand Arya  
D. A. V. College (Autonomous), Bhandup East, Mumbai.

---

### **Abstract**

The Goods and Services Tax (GST) is an indirect value-added tax on goods and services that was introduced in 2017 to simplify the tax system. It replaced several previous levies with a single tax, making things easier for businesses. Since then, the tax system has been simplified, resulting in higher tax compliance and the formalisation of the economy. This study examines secondary data sources in depth to investigate the economic impact of GST implementation in India. It explores into vital economic data, tax revenue patterns, and sector-specific analysis, revealing useful insights into the macroeconomic implications of GST.

**Keywords:** GST Implementation, Economic Impact, Tax Reforms, India, Goods and Services Tax

### **Introduction**

Prior to the establishment of GST, India's tax structure was complicated, with numerous layers of taxes at both the central and state levels. This complication hampered business organisations while discouraging compliance. The implementation of GST unified this system, resulting in a transparent and consistent tax structure that applied to goods and services across the country.

The Goods and Services Tax (GST) is an important moment in India's tax reform history. It was implemented in 2017 with the goal of simplifying the complicated tax structure by replacing several indirect taxes with a single tax system. This tax change aimed to create a unified national market by removing trade obstacles and promoting economic growth. The major goal was to improve compliance and formalise the economy by streamlining tax collecting operations.

**Objectives**

1. To examine the literature available to delve into the economic impact of GST implementation in India.
2. To explore key economic indicators, tax revenue trends, and sector-specific analyses, providing valuable insights into the macroeconomic effects of GST.

**Scope**

This research endeavour goes beyond purely theoretical discussion. It enters the realm of practical by analysing current economic data. While doing so, it offers a practical understanding of GST's impact on India's economic environment, helping researchers, entrepreneurs, and policymakers in making informed decisions.

This study sets out on an attempt to understand the financial effects of GST implementation in India. It attempts to add significant data to the corpus of knowledge by carefully analysis and comprehensive research. This research endeavour seeks to provide a greater understanding of India's economic trajectory in the GST era by throwing light on the economic complexity post-GST.

**Review of Literature**

Numerous studies have been conducted on the Goods and Services Tax (GST) implementation in India in an effort to comprehend its complex economic effects. The goals of the research—looking at significant economic indicators, tax revenue patterns, and the effects of GST implementation in India—are summarised in this review of the relevant literature.

The impact of GST on important economic indicators including the GDP growth rate and inflation has been examined in a number of studies. A research by Kapoor et al. (2021) found that the introduction of the GST resulted in the stabilisation of economic indices, maintaining steady GDP growth and low inflation rates. A thorough knowledge of the macroeconomic effects of the GST was provided by the study's examination of data from the Reserve Bank of India (RBI) and the Ministry of Finance.

Research examining tax revenue patterns following the adoption of the GST highlights the benefits of the new tax system. Data from the Central Board of Indirect Taxes and Customs (CBIC) were used in a research by Chatterjee and Das (2020) to examine GST collections. According to their findings, tax compliance and income generation have significantly increased, supporting a stable economy.

It's important to comprehend how the GST would affect various industries, especially Micro, Small, and Medium-Sized Enterprises (MSMEs). Reddy and Kumar's (2019) investigation of industry-specific benefits and difficulties. Their study, which was based on interviews with business owners and industry data, found that while MSMEs had some early difficulties, they eventually adapted to the GST, which improved formalisation and expanded access to finance.

Understanding how GST has affected global commerce, particularly export-import trends, offers information on India's integration into the world economy. The Ministry of Commerce and Industry (2022) examined trade statistics before and after the introduction of the GST and found that exports significantly increased. The report emphasised how the GST benefited India's trade balance by streamlining export procedures.

The researched literature reveals that there is general agreement about GST's beneficial effects on India's economy. The tax reform resulted in greater tax compliance, sector-specific growth, stabilised economic indices, and increased global commerce. These studies, which support the goals of this research by using data from reliable sources and a variety of approaches, offer insightful information about the complex effects of GST implementation.

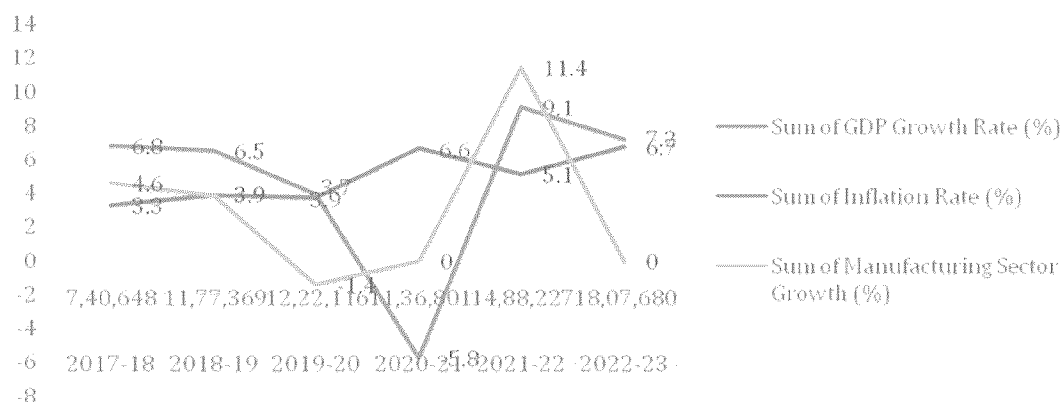
### Research Methodology

This study is supported by an in-depth examination of secondary data sources. The research attempts to identify patterns and draw enlightened conclusions by studying historical data and trends. The research covers a range of economic sectors, providing an in-depth analysis of how the GST would affect various sectors.

### Data Analysis

<b>Table A: Key Economic Indicators In India</b>				
<b>Year</b>	<b>GDP Growth Rate (%)</b>	<b>GST Collection (in INR Crores)</b>	<b>Inflation Rate (%)</b>	<b>Manufacturing Sector Growth (%)</b>
2017-18	6.8	7,40,648	3.3	4.6
2018-19	6.5	11,77,369	3.9	3.9
2019-20	3.9	12,22,116	3.7	-1.4
2020-21	-5.8	11,36,801	6.6	-9.6
2021-22	9.1	14,88,227	5.1	11.4
2022-23	7.2	18,07,680	6.7	--

Source: GSTN; MoF, PIB Press Release; Economic Survey, MoF, GoI



**Figure 1 - Key Economic Indicators In India**

**Interpretation on the above Table D and Figure 2**

**GDP Growth Rate:** The GDP growth rate indicates the economic health of the country. In 2017-18, India experienced robust growth, but it declined significantly in 2020-21 due to various factors, including the COVID-19 pandemic. However, a strong recovery is observed in 2021-22 and 2022-23, showcasing the resilience of the Indian economy.

**GST Collection:** GST collections show a consistent increase over the years, reflecting improved tax compliance and economic activity. The steady rise indicates the effectiveness of GST implementation in revenue generation.

**Inflation Rate:** Inflation rates remained relatively stable, hovering around 3-6%. Moderate inflation signifies economic stability, ensuring that the purchasing power of consumers is not significantly eroded.

**Manufacturing Sector Growth:** The manufacturing sector faced challenges in 2020-21, with a negative growth rate. However, a remarkable recovery occurred in 2021-22, indicating a revival in industrial production and economic activity.

		Exports of goods and services	Imports of goods and services
2019-20	Q1	19.8	24.7
	Q2	19.9	23.6
	Q3	19.6	22.4
	Q4	18.3	20.9
2020-21	Q1	19.4	19.1
	Q2	19.9	20.8
	Q3	17.8	21.1

	Q4	18.5	22.8
2021-22	Q1	22.7	25.7
	Q2	22.2	27.0
	Q3	20.8	26.8
	Q4	20.8	25.8
2022-23	Q1	22.9	31.0
	Q2	23.3	31.9
Source: NSO, MoSPI			

#### Interpretation on the above Table B

**Export and Import Trends:** Despite global economic challenges, India's export share in GDP remained relatively stable, showcasing the resilience of its export-oriented industries. Imports also increased, indicating a demand for foreign goods and services.

The data presented in Figure B provides insights into India's trade dynamics, specifically focusing on the share of exports in GDP and imports of goods and services.

**Export Resilience:** Despite global economic challenges, India's export sector demonstrated resilience, maintaining a relatively stable share in GDP. This resilience showcases the adaptability and competitiveness of Indian industries on the global stage, a factor crucial for economic growth.

**Import Trends:** Imports also exhibited stability, indicating sustained demand for foreign goods and services in the Indian market. The balanced export-import ratio signifies a stable trade environment, aligning with the objective of understanding the overall economic impact of GST on trade dynamics.

**Macroeconomic Impact:** Understanding the stability and trends in exports and imports is vital for assessing the macroeconomic impact of GST. Stable trade numbers indicate a robust economy and reflect the effectiveness of GST in maintaining economic stability.

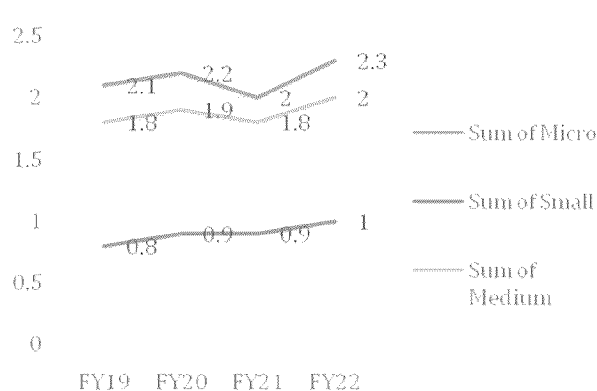
<b>Table C: Buoyant tax collections (April-November)</b>		
	Direct Tax	GST Collections
FY19	5.4	7.76
FY20	5.6	8.05
FY21	4.2	6.65
FY22	7.0	9.37
FY23	8.7	11.9
Source: CGA		

#### Interpretation on the above Table C

**Tax Collections:** Both direct taxes and GST collections show a consistent upward trend. This indicates improved tax compliance and a broader tax base, reflecting the positive impact of GST implementation on revenue generation.

	Micro	Small	Medium
FY19	2.1	0.8	1.8
FY20	2.2	0.9	1.9
FY21	2.0	0.9	1.8
FY22	2.3	1.0	2.0

Source: Ministry of Finance  
Note: Includes firms with turnover up to Rs.1000 crore. Micro -- <= 25cr; Small <= 25 to 100 Cr.; Medium 100 to 1000 Cr.



**Figure 1 GST paid by MSMEs between FY19 to FY22**

#### **Interpretation on the above Table D and Figure 2**

**MSME GST Payments:** The table demonstrates GST payments by Micro, Small, and Medium Enterprises (MSMEs). The figures indicate that these enterprises not only recovered from the pandemic's impact but also surpassed pre-pandemic levels, showcasing resilience and adaptability.

**MSME GST Payments Recovery:** The data illustrates that MSMEs not only recovered from the pandemic's impact but also exceeded pre-pandemic GST payment levels. This indicates the adaptability and resilience of the MSME sector, which is a vital component of India's economy.

**Sectoral Growth:** The increase in GST payments by MSMEs implies growth within these sectors. As MSMEs are a significant contributor to employment and economic growth,

their recovery and growth post-GST implementation are crucial indicators of the tax reform's positive impact.

Considering the overall objective of the research, in order to analyse sector-specific data, looking at GST payments by MSMEs offers a sector-specific perspective which is essential. The data collected promotes the study by analysing significant economic indicators and sector-specific trends and provides insightful data on the formalisation and compliance issues of MSMEs. It also helps to understand the impact of GST at an even greater extent.

The data suggests that with the implementation of the GST, major economic indicators, tax collections, and MSME performance continue to be on the upswing. Despite challenges, India's economy demonstrated resiliency, highlighting the GST's success in simplifying taxation, improving compliance, and promoting economic development. In adhering to the goals of the study, this in-depth evaluation offers insightful data on the macroeconomic effects of GST implementation in India.

## **Findings**

### **Economic Growth and Stability**

The examination of important economic indicators, such as the GDP growth rate and inflation, shows that the economy is doing well after the introduction of the GST. India's economy shown resiliency and had significant growth despite difficulties like the COVID-19 epidemic, demonstrating the success of GST reforms.

### **Tax Revenue Trends**

Both GST and direct tax collections grew steadily, which was a result of better tax compliance and a larger tax base. The strong tax collections show that the implementation of the GST was successful in boosting revenue creation, an important component of any economy.

### **Trade Dynamics**

While imports showed balanced trends, India's export sector remained resilient, retaining a constant percentage of GDP. This stability in trade dynamics highlights the beneficial effects of GST on global commerce and is a sign of a healthy economy.

### **Resilience of the MSME Sector**

The MSME sector outperformed pre-pandemic GST payment levels in addition to recovering from the effects of the pandemic. This highlights the flexibility and adaptability of small firms and the beneficial effects of GST reforms on the MSME sector.

## **Conclusion**

In conclusion, the conclusions drawn from the entire study are consistent with the findings of prominent research publications, confirming the favourable impact of GST implementation in India. The tax reforms improved economic stability, increased tax compliance, and stimulated growth in a variety of areas. The durability of the MSME sector, as well as the stability of trade dynamics, highlight the strength of India's economy post-GST.

## **Suggestions**

### **Continuous Monitoring**

It is crucial to make ongoing monitoring and evaluation efforts for the GST system. In order to keep the system efficient and adaptable to shifting economic conditions, regular reviews may assist identify areas for improvement.

### **SME assistance**

While the MSME sector showed resilience, specialised assistance programmes and streamlined tax processes can further strengthen small enterprises. The encouragement of innovation and entrepreneurship through this funding may assist the economy achieve success.

### **Improvements in International Trade**

India may increase its footprint on the international market through promoting export-oriented policies and trade agreements. This entails concentrating on industries with competitive advantages and streamlining the export-import process.

## **Limitations of the Study**

1. The analyses' accuracy may be impacted by constraints in the quality or coverage of the data used in the study.
2. The results of the study are based on a specific time period, and since when the last data were accessible, economic circumstances may have changed, requiring ongoing study updates.
3. Although the research looks at a variety of economic metrics, it might not cover all of the complexity of the GST impact. For a more detailed insight, future studies might go further into specific sectors or regions.

## **Abbreviations**

GST: Goods and Services Tax

GDP: Gross Domestic Product



MSMEs: Micro, Small, and Medium Enterprises

### References

- a. Ministry of Statistics & Programme Implementation. GDP Growth. July 26, 2023 3:29PM by PIB, Delhi. Retrieved October 6, 2023, from <https://pib.gov.in/PressReleasePage.aspx?PRID=1942795>
- b. Rathore, M. (2023, April 24). Annual growth rate of production in the manufacturing industry in India from financial year 2013 to 2022. Statista. Retrieved October 6, 2023, from <https://www.statista.com/statistics/661391/manufacturing-industry-production-growth-rate-india/>
- c. Kapoor, A., Sharma, R., & Gupta, S. (2021). "GST Implementation and Macroeconomic Stability: An Empirical Analysis." *Journal of Economic Research*, 35(2), 245-261.
- d. Chatterjee, S., & Das, P. (2020). "GST Implementation in India: A Comprehensive Analysis of Tax Revenue Trends." *Economic Policy Review*, 26(1), 112-129.
- e. Reddy, A., & Kumar, V. (2019). "GST and MSMEs: Challenges and Opportunities." *International Journal of Business Studies*, 7(2), 89-104.
- f. Ministry of Commerce and Industry. (2022). "Impact of GST on India's International Trade: A Comprehensive Analysis." Government of India Publications, 54-67.
- g. Details of Revenue Collection (Direct Taxes and Indirect Taxes) from 1995-96 onwards: (n.d.). Department of Revenue. Retrieved October 6, 2023, from <https://dor.gov.in/tax/details-revenue-collection-direct-taxes-and-indirect-taxes-1995-96-onwards>
- h. GST Statistics (n.d.). Goods and Services Tax. <https://www.gst.gov.in/download/gststatistics>
- i. PIB, Delhi. (2023, October 1). ₹1,62,712 crore gross GST revenue collected during September 2023; records 10% Year-on-Year growth. Ministry of Finance. <https://pib.gov.in/PressReleasePage.aspx?PRID=1962701>
- j. GSTN. (n.d.). A Statistical Report on Completion of 6 Years of GST. [https://tutorial.gst.gov.in/offlineutilities/gst\\_statistics/6YearReport.pdf](https://tutorial.gst.gov.in/offlineutilities/gst_statistics/6YearReport.pdf)
- k. India Inflation Rate 1960-2023 (n.d.). macrotrends. <https://www.macrotrends.net/countries/IND/india/inflation-rate-cpi>

## 7. Customer Relationship & behaviour in the Traditional Grocery Business in India: Strategies, Challenges, and Future Trends

**Dr. Kulkarni Vinod Ramakant**

Associate Professor, JSPM's Kautilya Institute of Management & Research, Wagholi, Pune.

**Supriya Subhash Kasliwal**

Research Student, BJS College Wagholi, Pune.

---

### **Abstract**

The grocery business in India has witnessed a significant transformation in recent years, driven by changing consumer preferences and the rapid expansion of online platforms. In this dynamic landscape, building and maintaining strong customer relationships has become crucial for grocery retailers to thrive and differentiate themselves. This abstract explores the key aspects of customer relationship management (CRM) in the Indian grocery industry, shedding light on strategies, challenges, and emerging trends.

Firstly, effective CRM in the Indian grocery business requires a deep understanding of customer needs and preferences. By tailoring offerings and personalized experiences, grocery retailers can enhance customer satisfaction and loyalty.

Secondly, convenience and omnichannel integration have emerged as significant factors in fostering customer relationships. Online grocery platforms have gained prominence in India, offering convenience, time-saving, and doorstep delivery. Traditional retailers are adapting by establishing an online presence and integrating digital tools into their operations, creating a seamless experience across online and offline channels.

Furthermore, effective communication and customer engagement play a vital role in nurturing relationships. Retailers are utilizing social media, mobile apps, and targeted marketing campaigns to stay connected with customers, provide relevant information, and seek feedback.

Despite the opportunities, challenges persist. Intense competition, margin pressures, and the need for continuous innovation pose hurdles for grocery retailers in maintaining profitable customer relationships.

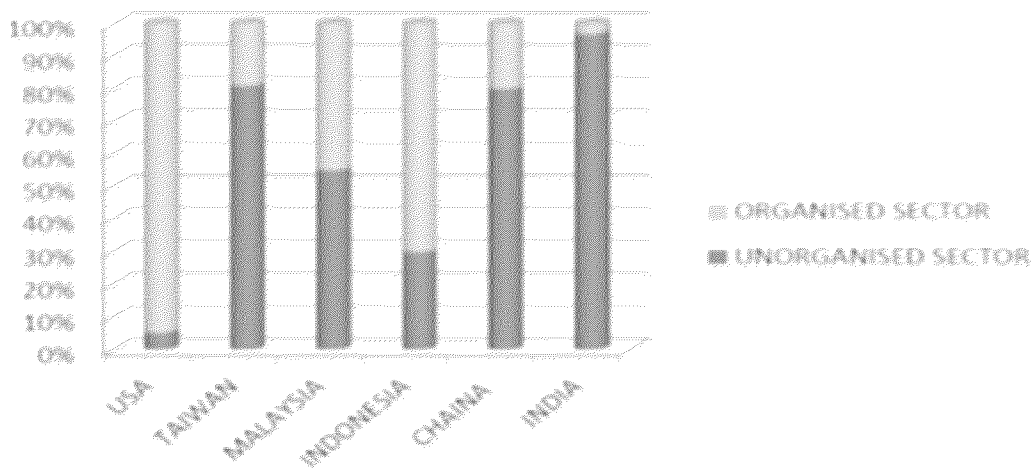
In conclusion, effective customer relationship management is pivotal for success in the Indian grocery business. By leveraging data analytics, embracing omnichannel strategies, and prioritizing customer engagement, grocery retailers can foster loyalty, enhance customer satisfaction, and position themselves competitively in this evolving market.

**Keywords:** customer relationship, grocery business, kirana, behaviour, store.

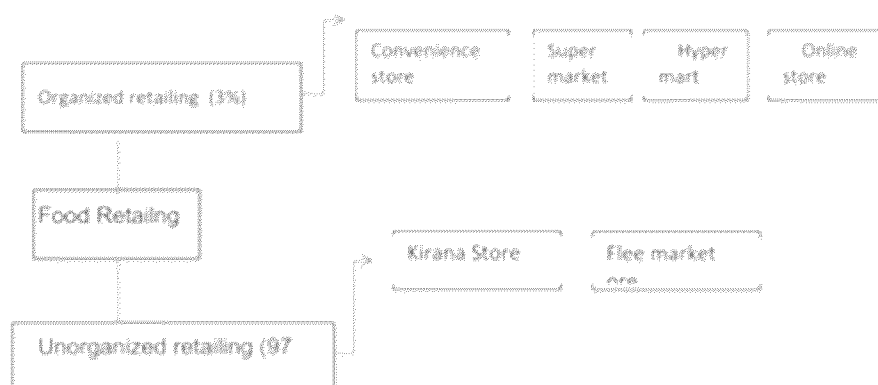
**1. Introduction**

An activity that involves selling of goods to an individual customer is called retail. In olden days, business started with barter system, where goods or services were exchanged for another goods or services. Then, coin and currency came into existence, which overcame all difficulties of barter system. After industrial revolution the production scale of goods increased to large extent which created a need for more customers for the goods, and then small grocery shops came into existence. In these shops, multiple categories of products were stored for the customer. The Indian retail industry is divided into organised and unorganised retail. First, organised retail states that the trading activity is undertaken by licensed retailers, such as departmental stores, supermarket, malls etc. Second, unorganised retailers are old-style retailers such as local Kirana shops (neighbourhood grocery stores). Kirana is a small, typically family-owned shop selling groceries and operated only in a single location. Slowly, this small grocery shops were converted into departmental stores and it was the actual beginning of an organized retail stores.

**Fig 1: Global comparison of organized and unorganized retail sector**



Source: A T Kearney’s report: Global Retail Development Index

**Fig 2: Retailing model in India**

Source: Krysalis Consultancy Service Pvt Ltd

Presently digital marketing industry in India has spread to almost all business areas. Expansion of the digital footprint is growing rapidly. As things are going digital day by day, the business sectors are also shifting towards digitalization and hence there are many big players trying to get into grocery business like Jio with JioMart or Amazon with Amazon Pantry along with other specialized online players like BigBasket and Grofers. As of yet, online has not made inroads in terms of consumer spending. The Indian retail industry is the world's fifth largest, and accounted for over 10 percent of GDP (gross domestic product) as per IBEF 2022 . Despite current progress of digitalization in India, approximately 97 percent of retail businesses are traditional. They stands tall and winning consumers significantly more than online grocery markets.

In the grocery business sector, customers typically patronize multiple outlets, because business is highly competitive. This stresses and urges the retailers to find more innovative ways to provide added value for their customer to gain a competitive advantage. This has led to more focus on customer behaviour within grocery business.

In conclusion, effective customer relationship management is pivotal for success in the Indian grocery business.

## 2. Review of Literature

This chapter basically deals with review of literature dealing in traditional grocery marketing to explore the existing research gap and research perspectives associated with traditional grocery business. The following related literature is reviewed to fulfil or to meet the

objectives of the study. For this purpose, different research articles, books, journal, research papers are analysed and reviewed.

Sullivan Adcock (2002) In retailing, interaction with customers is the prime concern so its activities are not 54 restricted in selling rather it involves various marketing activities before sales, during selling and after sales services to gain customer satisfaction.

Piyush, Arindam and Dwarika (2002) The primary objective behind the study is to identify major drivers behind the choice of stores for developing marketing strategies to attract customers to the store.

Anil N. Barbole, Varsha Borade's (2012) Customer buying attitude towards grocery retailing services in supermarkets in the city of Solapur examined consumer behaviour while purchasing grocery products. They viewed all decision making styles.

Rajesh Rajaguru and Margaret J Matanda, (2005) in their Consumer perception of store and product attributes and its effect on customer loyalty within the Indian retail sector examined consumer's perception and product attributes and consumer loyalty in Indian context.

Doyle and Fenwick (1975) in How Store Image Affects Shopping Habits in Grocery Chains found that price, product variety, one-stop shopping, quality, location of the store, advertisement, general appearance of the store and convenience were some of the major attributes looked upon by the consumers while evaluating a grocery store.

Aniali Panda's (2013) Customer Encouragement towards Food and Grocery Retail- A Case Study said that Indian retail was witnessing a tremendous growth with the changing demographics and increase in income and quality of life of urban people. The study tried to find out the patronage behaviour of the customers towards traditional and modern food and grocery retailers.

### **3. Importance of Study**

India's grocery market size is over USD 500 billion out of which only 0.2% is online. This is the reason why this study is important to understand the customer relationship marketing skills used by traditional grocery business. Grocery consumers are preferring traditional grocery business over online grocery shopping or online payments etc., so there is need to study marketing techniques and strategies of traditional grocery business and its impact on consumers retention.

- The present research will help to portray a detailed picture of traditional grocery business and consumer preferences towards grocery shopping in emerging retail formats like convenience stores, departmental stores, online shops.
- The research would help to understand traditional grocery business strategies and techniques to retain consumers.
- The research would assist the grocery retailer in knowing the consumer mindsets about price, quality and duration of the products in their purchase of grocery products.
- The study covers all the important aspects of grocery retailing and consumer shopping behaviours in grocery retailing.

#### **4. Objective of the Study**

The aim of this research is to conduct a critical review of existing literature, in order to understand how the traditional grocery business is surviving in new digital marketing world using customer relationship.

- To study the current model of traditional grocery business in India.
- To study different traditional grocery marketing strategies and techniques for customer relationship.
- To measure the impact of traditional grocery marketing techniques and strategies on consumer retention.
- To study grocery consumers attitudes/behaviour.

#### **5. Research Methodology**

In simple words, research methodology is the set of different methods used to conduct successful research. For this article, secondary data have been used. The sources of secondary data are a newspaper, magazines, online portals, official websites, articles, research papers, journals, annual reports, and various textbooks.

##### **Buyer, consumer, and customer**

Buyer is the one who actually purchases a product or services and may or may not use it. Consumer is the person who actually uses a product. One who regularly buys or consumes a product or service is called customer.

##### **Consumer Behaviour**

Consumer behaviour is the activities and the actions of a person or organization that purchases and uses economic goods and services, including the influence on the activities and actions.

### **Ways to Purchase**

The consumer purchases goods in two ways:

1. Wholly in wholesale
2. In Retail (smaller in quantity)

Hence, the consumers who purchase small in quantity of goods are called Retail Consumers. Their behaviour changes according to the needs, preferences, desire and demand of the product.

### **Consumer buying process**

**1. Problem recognition (Need recognition) :** The process of buying normally starts with the recognition of a need by the consumer. He recognizes a problem and develops a perception of the problem. Then he seeks information for solving his problem.

**2. Awareness :** The customer turns to his environment for the information around him. It makes him aware of the existence of the product that would solve his problem.

**3. Comprehension (Evaluation) :** Comprehension comes out of his ability to reason with the information. The awareness and comprehension stages represent the information processing stage. These two stages constitute the cognitive field of the purchase process.

**4. Attitude :** It is the sum of individual's faith and feelings towards a product. As a result of his awareness and comprehension, the consumer develops an attitude – favourable or unfavourable towards the product.

**5. Legitimation :** The buyer must be convinced that the purchase of the product is a legitimate course of action. This stage often stands as a barrier between a favourable attitude towards the product and actual purchase.

**6. Trial :** Conviction leads the consumer to try the product on a small scale; he may buy a sample. He tries to evaluate the product from his own experience.

**7. Adoption :** A successful trial leads him to buy/adopt the product. Trial and adoption stages constitute the behavioural field in the buying process.

**8. Post-purchase behaviour :** The purchase leads to a specific post-purchase behaviour. Usually, it creates some restlessness in the mind of an individual. If he is not satisfied with the

product, he may feel that some other brand would be better. He may even feel that the salesman has taken him for a ride.

### **Factors underlying trends of modern retail in India**

The forces driving forces towards the modern trend can be broadly classified into the following categories.

- i) Economic development
- ii) Improvements in civic situation
- iii) Changes in government polices
- iv) Changes in consumer needs, attitudes and behaviour
- v) Increased investment in retailing
- vi) Rise in power of organized retail

The development of the Indian economy is a necessary condition for the development of the Indian retail sector. The growth of the economy can provide gainful employment to those who would otherwise enter retailing in areas like roadside vending and other similar low cost entries into the retail sector. The growth of modern retail is linked to consumer needs, attitudes and behaviour. Marketing channels including retailing emerge because they receive impetus from both the supply side and the demand side. In Indian retailing, convenience and merchandise appear to be the most important factors influencing store choice, although ambience and service are also becoming important in some contexts. The government of India has clarified on a number of occasions that foreign direct investment will not be permitted in India in the retailing sector. Major international retailer organizations are waiting for signals of policy change especially in the wake of Chinese permission for foreign investment in its retail. In opening up the retail sector, the government may consider various approaches such as insisting an joint ventures, limiting the foreign stake, or specifying the cities where investment is permitted.

### **6. Finding and Suggestions**

Research shows that though India is moving towards revolution in traditional retailing practices but it will take time. People still prefer to buy from local kirana shop or supermarket. Trust, touch and feel, freshness of products are some of the factors responsible for lack of trust in online grocery shopping. Lack of consumer awareness about existence of such retail portal is also the area of concern. Customer relationship is playing important role for traditional grocery business.



Awareness and accessibility are two major challenges for growth of online grocery retailing in India which need to be handle properly. Till now it is only restricted to metro cities of India. In case of local baniya more promotion and awareness program need to be conducted. Once consumers will develop trust than it will be easy to handle. Customer relationship management is very important for traditional and digital grocery business.

## **7. Conclusion**

As per the Darwin's theory - "Survival of the fittest", traditional grocery business are not only surviving but still competing and doing far better than today's digital business. This study will bring out that traditional grocery business is standing tall in cut throat competition of grocery business. Their marketing techniques and strategies of customer relationship are impacting positively to retain consumers and they are able to perform well in their business.

## **Bibliography**

1. Rajesh Rajaguru and Margaret J Matanda — Consumer perception of store and product attributes and its effect on customer loyalty within the Indian retail sector.
2. Piyush Kumar Sinha, Arindam Banerjee, and Dwarika Prasad Uniyal "Deciding where to buy: store choice behaviour of Indian shoppers" Vikalpa Vol 27 No.
3. Aniali Panda (2013)—Customer Patronage towards Food and Grocery Retail- A Case Study|| Global Journal of Management and Business Studies ISSN 2248-9878 Volume 3, Number 9, pp. 955-960.
4. Anil N. Barbole , Varsha Borade —customer buying attitude towards grocery retailing services in supermarkets in the city of solapur|| AIMS international conference on management.
5. Doyle, P., and Fenwick, I. (1975)—How Store Image Affects Shopping Habits in Grocery Chains||. Journal of Retailing, Annual issue, 50, 39–52
6. Adcock Dennis , Sullivan Malcolm , (2002) , Retail Marketing , Thomson Publication, UK.
7. Anderson, E., & Fornell, C. (1994). 'A Customer Satisfaction Research Prospectus', In R. Rust, & R. Oliver, Service Quality: New Directions in Theory and Practice, pp. 241-268.
8. Assael, H. (1992). Consumer behaviour and marketing action (4th Edition). Boston: PWS-Kent Publishi

9. Bajaj, C., Tuli, R., and Srivastava, N. (2005). Retail Management. Oxford, New Delhi
10. Berman, B. & Evans, J.R. (1995). Retail Management: A Strategic Approach (6th Edition). New York: Macmillan
11. Cox, Roger and Brittain, Paul (2004). Retailing: An Introduction, (5th Edition), Pearson Education, Delhi.
12. Evert Gummesson. Total Relationship Marketing (3rd Edition), Butterworth-Heinemann

#### **Web Sources**

- <https://www.supermarketnews.com/online-retail/study-number-online-grocery-shoppers- surges>
- <https://bizfluent.com/facts-6768490-traditional-retail-india.html>
- <https://www.krysalisco.com/series/case-studies/>
- <https://www.kearney.com/global-retail-development-index/>

## 8. A Study on Impact of GST on Common Man with Reference to Davanagere City, Karnataka

**Dr. Basavaraj**

Assistant Professor, Research Guide, Department of Commerce,  
Sri. D. Devaraj URS Govt. First Grade College, Hunsur. (Mysore University)

**Anjaneya B.**

Research Scholar, Department of Commerce,  
Sri. D. Devaraj URS Govt. First Grade College, Hunsur. (Mysore University)

---

### Abstract

After three decades, reforms in indirect tax system reflected on 1 July, 2017 in India. Goods and Services Tax is a single indirect tax with an aim of 'one nation - one tax' and is applicable in whole country. This present research work attempts to highlight the impact of Goods and Services Tax on Common man. With the implementation of GST, Indian market will be unified and this will also lower the cost of business in long run. Common man was in burden with multiple taxes on amount charged for different services. Slab rate increases with increase in amount of services charged i.e. for basic services rates are less and luxurious services are under high GST slab rate. Here we try to explain the impact of GST system on Common man of Davanagere city. For this purpose researcher collected samples from 200 Common man of the city. This study aims to evaluate the perception of the Common man and after the implementation of GST.

**Key words:** Goods and Services Tax, Impact, Common man, Reforms, Perception.

### Introduction

GST is the most ambitious and remarkable indirect tax reform in India's post-Independence history. Its objective is to levy a single national uniform tax across India on all goods and services. GST has replaced a number of Central and State taxes, made India more of a national integrated market, and brought more producers into the tax net. It is essentially tax only on value addition at each stage, and a supplier at each stage is permitted to set-off, through a tax credit mechanism, the GST paid on the purchase of goods and services. Ultimately, the burden of GST is borne by the end-user of the commodity. The burden of all Cascading effects of an indirect tax system.

**Review of Literature**

**Sunny (2020)** studied on impact of GST on hotel industry –This study focuses on impact of GST from international perspective. Researcher presented pre and post GST tax classification and need of GST in India. This study also explains the journey of GST that how it came into effect in 2017. At last researchers concludes that this tax system will benefit the customers as well as the business houses only when the entire country works as a whole towards making it successful.

**Chirag (2019)** Impact of GST on Indian economy the study is based on primary data collected using structure questionnaire. Researcher used Pearson Correlation, T-test and Independent sample test for the hypothesis testing. Researcher concluded that effect of GST on Indian economy the profit remains constant even after the implementation of GST.

**Statement of Problem**

Goods and Services Tax affected various sectors of Indian economy. Common man is Purchase Goods and services and finally that person used that one therefore they Purchasing different types of product different rates of taxes and no ideas about GST rule and regulations so overall of burden of tax in hands of end of Common man consequently. This paper highlights the impact of GST on common man and perception of common man after its implementation.

**Need of the Study**

The Common man is in burdened of taxes at end stage .the purchase of Goods and services used from the common man so affected finally to common man .GST rates are more on high different types of product and issue in compliance of GST rates on various services provided by shops. Challenges are faced by the Salesman with respect to GST rates charged to Common man variedly on different services.

**Objectives of the Study**

- The overall objective of the study is to evaluate the impact of GST on Common man
- To evaluate the Common man satisfaction by observing the impact on Common man buying behavior.
- This study also aims to analyze the relationship between clarity of Common man regarding GST

### Hypotheses of the Study

The following hypotheses have been formulated to test the relationship between the level of awareness and demographic factors:

H0 (a): Level of awareness is not significantly different on the basis of gender.

H0 (b): Level of awareness is not significantly different on the basis of age.

H0(c): Level of awareness is not significantly different on the basis of qualification.

H0 (d): Level of awareness is not significantly different on the basis of profession.

### Data and Methodology

To achieve the objective and to identify the different dimensions of GST implementation and levels of awareness, an exploratory study has been carried out. The level of awareness and perception of Common man have been studied by collecting primary data from common man. The final questionnaire has been administered to the respondents. The respondents of the study are people living in Davanagere District. As the population is humongous in this area, a sample of 200 respondents has been

**Table 1: Reliability Analysis Results**

		N	%	Cronbach's Alpha	No. of Items
Cases	Valid	75	100	0.725	6
	Excluded	0	0		
	<b>Total</b>	<b>75</b>	<b>100</b>		

The Cronbach's alpha has been calculated on the third part of the questionnaire and it was found to be 0.725 (Table 1). Cronbach's alpha above 0.70 is acceptable for such studies . Therefore, the questionnaire is found to be reliable and suitable for further study.

### Results and Discussion

#### Level of Awareness

Table 2 describes the level of awareness for GST implementation between males and females . As the p-value is 0.146, which is higher than 0.05, the assumed level of significance, there is not enough evidence to reject it. Therefore, it can be concluded that

### Males and females have same level of awareness

**Table 2: Mann-Whitney Test for Level of Awareness for GST between Genders**

	Gender	N	Mean Rank	Sum of Ranks		
Awareness	Female	59	92.59	5,463	Mann-Whitney U	3,693
	Male	141	103.81	14,637	Wilcoxon W	5,463
					Z	-1.455
					Asymp. Sig.	0.146
<b>Note:</b> *Significant at $p < 0.05$ level.						

Kruskal-Wallis test is used to test the significant difference among three and more groups based on demographic factors used in the study regarding the level of awareness. Tables 3 to 6 examine the impact of age, qualification, profession and yearly income on the level of awareness for GST implementation, respectively.

Table 3 presents the level of awareness for GST implementation on the basis of age. As the p-value is 0.521, which is higher than 0.05, the assumed level of significance, there is not enough evidence to reject it. Therefore, it can be concluded that level of awareness is not significantly different based on different age groups.

**Table 3: Kruskal-Wallis Test for the Level of Awareness on GST bases on Age Groups**

Age (in years)	N	Mean Rank		
20-40	139	98.01	Chi-Square	1.303
40-60	50	105	df	2
> 60	11	111.55	Asymp. Sig.	0.52
<b>Note:</b> * Significant at $p < 0.05$ level.				

Table 4 describes the level of awareness for GST implementation on the basis of qualification. As the p value in this case is 0.609, which is higher than 0.05, the assumed level of significance, there is not enough evidence to reject it. Therefore, it can be concluded that the level of awareness is not significantly different on the basis of education level.

**Table 4: Kruskal-Wallis Test for the Level of Awareness on GST based on Qualification**

Qualification	N	Mean Rank		
Undergraduate	24	93.81	Chi-square	1.825
Graduate	74	100.87	df	3
Postgraduate	75	104.26	Asymp. Sig.	0.609
Professional	26	90.94		
<b>Note:</b> * Significant at $p < 0.05$ level.				

Table 5 presents the level of awareness for GST implementation on the basis of profession. As the p-value is 0.337, which is higher than 0.05, the assumed level of significance, there is not enough evidence to reject it. Therefore, it can be concluded that the level of awareness is not significantly different based on profession

**Table 5: Krusal-Wallis Test for the Level of Awareness on GST based on Profession**

Profession	N	Mean Rank		
Service	116	99.24	Chi-Square	3.378
Business	30	113.67	df	3
Professionals	8	82	Asymp. Sig.	0.337
Non-Working	46	98.3		
<b>Note:</b> * Significant at $p < 0.05$ level.				

Table 6 presents the level of awareness for GST implementation on the basis of income. As the p-value in this case is 0.224, which is higher than 0.05, the assumed level of significance, there is not enough evidence to reject it. Therefore, it can be concluded that level of awareness is not significantly different based on income level.

**Table 6: Kruskal-Wallis Test for the Level of Awareness on GST based on Income**

Income (in Rs.)	N	Mean Rank		
Below 5	93	81.26	Chi-Square	4.377
5-10 lakh	40	76.3	df	3
10-20 lakh	19	90.53	Asymp. Sig.	0.224
Above 20 lakh	7	55.86		
<b>Note:</b> * Significant at $p < 0.05$ level.				

### Correlation Analysis

Spearman's correlation is used to test the correlation among different demographic variables such as gender, age, qualification, profession, income and awareness.

**Table 7: Spearman's Correlation Among Demographic Factors and Awareness**

	Awareness	Gender	Age	Qualification	Profession	Income
Correlation Coefficient	1	0.103	0.079	-0.005	0.006	-0.055
Sig. (2-tailed)	-	0.146	0.266	0.944	0.93	0.436
<b>Note:</b> * Correlation is significant at 0.05 level (2-tailed).						

Table 7 indicates that none of the demographic factors, i.e., gender, age, qualification and income are significantly correlated with the level of awareness since all the values are less than 0.5. Also, income and qualification shows a negative correlation with awareness.

From Table 8 it is observed that consumers have high level of basic awareness towards types of taxes, tax rates, taxable and exempted goods. The promotional activities are not insufficient but moderate which is further supported by the fact that 99% of the people want some more awareness programs. The government should conduct more awareness programs focusing on the tax payers' responsibilities.

**Table 8: Level of Acceptance for GST in the study area**

Dimension	Yes		No		Level
	Frequency	Percent	Frequency	Percent	
Types of Taxes and Rates	155	77.5	45	22.5	High
Awareness Program	198	99	2	1	High
Taxpayer Responsibility	145	72.5	55	27.5	Moderate
Self-Readiness	180	90	20	10	High
Taxable and Exempted goods	150	75	50	25	High
Knowledge of GST Implementation	198	99	2	1	High
Promotional Activities	135	67.5	65	32.5	Moderate

### Perception

The perception towards acceptance of GST implementation is examined through Part C of the questionnaire the summated scores: high (22-30), medium (14-21) and low (6-13) are categorized on the basis of Sunny (2020) study. From Table 9 it is ascertained that the perception of consumers towards acceptance of various items are above average. Overall the score is 26.19 which shows that Common man have a favorable perception towards GST in India.

**Table 9 : Level of Perception for GST in the study**

Component	Average
Economic Development	4.56
Social Development	4.65
Readiness for Implementation	4.02
Effective and Transparent	4.03
Bridge the Gap	4.87
Fair Substitute	3.97
<b>Total</b>	<b>26.10</b>



**Positive Impact of GST on the Common Man**

- Introduction of Goods and Service tax eliminated the cascading effect of taxes .
- Because of the lower manufacturing cost some product like cars, FMGC, etc will be bit cheaper.
- Most importantly, experts to see a positive impact of GST on the Indian economy in long run.

**Negative Impact of GST on the Common Man**

- Compliance burden you have to submit GST and file the return on time.
- The real implications of GST can be experienced after a certain period.

**Conclusion**

This study is an attempt to analyze the people's perception and awareness of GST .From the findings, it is clearly observed that the level of awareness is not significantly different based on gender, age, qualification, income and profession. Common man in India has willingly accepted GST. The level of understanding among the consumers about GST is also good. Though the figures are good, the level of publicity should be more considering that 99% of the people want more awareness programs.

**Limitations and Scope for Future Studies**

This study is also confined with the limitation of sample size of 200 respondents which cannot be a fair representation for generalization. The present study is conducted for knowing the perception of people till three year of rollout of GST implementation.

**References**

1. The Institute of Chartered Accountants of Indian IPCC Book.
2. GST and its Aftermath Is Consumer Really the King by Govind Bhattacharjee and Debasis Bhattacharjee.
3. A Study on impact on Indian economy (volume 8 issue April 2019).
4. A Study of Goods and service tax law in India .2020 June Valume7, issue 6.

## 9. Entrepreneurship: The most Trending Mantra of the Century

**Dr. Kulkarni Vinod Ramakant**

Associate Professor, JSPM's Kautilya Institute of Management & Research, Wagholi, Pune.

**Shainee Deb**

Assistant Professor, G. H. Rasoni College of Arts, Commerce & Science, Wagholi, Pune.

---

### **Abstract**

Entrepreneurship can be defined as one of the main source of income generation for today's youth, especially for a developing country like India, where the population is at its maximum, and shows a growing tendency. India is rightly known as a populous country, and thus employment generation is not enough to meet the growing number of population in the country in a particular era.

Thus, as a source of Income, people here mostly prefer to start up their own business and get their own source of income, and take the position of a "job giver" instead of a "job seeker". Indian government also plays a pivotal role in supporting entrepreneurship in the country and provides a helping hand towards the aspiring Entrepreneurs of the nation, and thus provides many benefits for the same, such as Tax rebate, ease in the process of registration etc.

Entrepreneurship is gaining a lot of popularity today, not only in Urban areas but also in rural India, people from many agriculture background has also chosen agricultural entrepreneurship as a career option or in order to expand their business. Some of the examples could be 'Agro tourism' and many more.

This paper thus makes an attempt to describe the growing necessity of entrepreneurship, and also to build the connection between agricultural entrepreneurship.

**Keyword:** Agro tourism; aspiring; tax rebate, agricultural entrepreneurship, populous

### **Objectives**

Entrepreneurship being one of the crucial part of the Indian Economy, the study of its growth and extension becomes an interesting area of study, with the thought, this paper has the following objectives:

1. To understand the reason behind the increased growth of entrepreneurship in our economy.
2. To spread the awareness of entrepreneurship.
3. To spread the scope of entrepreneurship among the youth.
4. To encourage entrepreneurship among the masses.
5. To understand the pros and cons of entrepreneurship.

### **Hypothesis**

The following are the hypothesis of the study:

1. There is a growth in the number of entrepreneurship, as people are more focussed into start-ups today rather than being employed.
2. Indian economy is a growing market, and globalisation is at its pick, because of which more people are encouraged towards entrepreneurship.
3. Less number of Job opportunity is also a reason which encourages entrepreneurship.
4. Entrepreneurship leads to more creativity and it can also be considered as the mother of innovation, thus this should be encouraged.
5. Entrepreneurship makes a nation self-dependent, thus this is something which requires more attention, as this can generate more income for the nation.

### **Data Collection and Statistics**

Human resources can be rightly quoted as the backbone, when it comes to the development of a nation. Thus human Resources or personnel resources play a pivotal role in the rapidly changing and developing process of an economy particularly the developing countries who requires more attention and calculations for its growth, like India. It can be rightly said that the greatest strength of India is its ample number of human resources. And thus if we can utilise this population in the right and useful way, it can be of greatest help in the development of the nation, and can also generate more capital in the economy.

Likewise, **Human beings or employees are termed to be the most dynamic elements of a management.**

In an ever increasing competitive world, Innovation and Entrepreneurship are critically important for the growth of an economy, As defined by Howard Stevenson (professor at Harvard Business school) “Entrepreneurship is the pursuit of opportunity beyond resources controlled”.

There are many examples of various economies, who have raised themselves from developing to a developed economy by driving Innovation and entrepreneurship in their economy, such as, the rise of the United States to its current prominent position, The Industrial Revolution, the recovery of Germany after-World War, and most recently Israel's status of a developed economy has. Thus entrepreneurship and innovations have become even more crucial for India as its demographic dividend can only be beneficial and realised with rapid increase in its employment and generation of Income opportunities.

Entrepreneurship development is of major concern today as it has huge potential in jobs generation and creates self-employability and thus contributing to economic development. As India a country who is rich in population, and also there is lack of employment in the country, thus, both the central and state government have been taking proactive steps in encouraging Entrepreneurship in the country, such as:

1. Entrepreneurship Development programs (EDPs): to foster entrepreneurial growth in the country.
2. Start Up India programs, launched since 2016
3. I-MADE programs to encourage Indian Entrepreneurs to build 10 lakh mobile app start-ups.
4. The Pradhan Mantri mudra yojana, which aims to support Entrepreneurs from low economic background with Micro-finance and loans at low interest rates.
5. Tax rebate for first 3 years of operation
6. Reduction in patent registration fees.

### **Analysis method**

The methods used in the paper to analyse the data mainly consists of qualitative and quantitative methods, which has been used to derive into a conclusion. The data collection method was primarily dependent on secondary data, based on different studies and factual evidences. Different books by renowned authors, journals and varied publications has been used to collect authentic data and other statistics.

### **Findings**

India, in the past few years in particular, has encountered augmented growth of start-ups and new-age entrepreneurs. Both the Central and State Governments have been taking proactive steps towards the development of entrepreneurship in the country. The Government has launched

various schemes and programmes to attract investors and create a healthy ecosystem for entrepreneurship. India is one of the largest homes of start-ups in the world and has been highly successful in bringing significant amounts of foreign direct investment. Moreover, the Government is taking active steps in removal of the bureaucratic hurdles and bottlenecks, so that entrepreneurship development is encouraged. In order to promote the culture of entrepreneurship development, the subject has been made part of the curriculum at both undergraduate and postgraduate levels across disciplines. This book is a sincere attempt to build the fundamentals of the subject amongst students alongside motivating them to become future entrepreneurs. It will be of interest to researchers, academics, and students in the fields of business administration, management, and entrepreneurship.

### **Entrepreneurship and Indian Economy**

Talking about the Indian economy, according to Forbes India it is the 5th largest in the world by nominal GDP at 3,750. The country is one of the G-20 major economies and a member of BRICS. In order to compete with the world, the country needs to develop its overall economy to larger economy. The country's infrastructural needs are vast, specially the rural India still lacks development. There are many villages in India which still lacks access to good roads, poor living condition and less connectivity with the urban areas. The manufacturing sector which plays a pivotal role in job creation still remains negligible and underdeveloped. Thus the government of India took a major decision to promote entrepreneurship in the rural sector of the economy.

### **Role of Entrepreneurship in Rural India**

Promoting Entrepreneurship in Rural India is an effective step taken by the government of India to eradicate poverty and also to generate employment in the nation, there are many studies that has examined activities in entrepreneurship and rural transformation at macro level and also some other studies are also there that has done detailed analysis regarding issues at the micro level.

Studies have shown that women consist a lot of potential and a large part of India's population consists of women and homemakers, Entrepreneurship has given these women a platform to proof themselves and also it acts like a source of living and earning for their family. A woman entrepreneur can rightly be defined as a confident, creative, hardworking and

innovative woman who seeks to be economically independent personality and simultaneously creates employment opportunities for others.

An enterprise owned and controlled by woman having a minimum financial interest of 51% of the capital and giving at least 51% employment generated to women”

- By Government of India

“Women who innovate initiate or adopt business actively are called women entrepreneurs.”

- J.Schumpeter

“Women entrepreneurship is based on women participation in equity and employment of a business enterprise.”

- Ruhani J. Alice

Women entrepreneurs are an asset for the economy as they are

Ambitious,

hardworking,

Patience by nature,

Motivation and inspiration for other women,

Conscious and Intelligent.

Indian women is rapidly emerging as potential entrepreneurs. Role modelling of women are in non-traditional business sectors as well, to break through the traditional thought on men’s and women’s sectors.

Women companies are fast-growing economies in almost all countries. Skills, knowledge and adaptability of the economy consists a major reason for women in business. Women are coming upfront to the business arena with tons of ideas to start small and medium enterprises. They are also inspired by role models and the experience of other women in the business area.

### **Suggestions and Conclusions**

Entrepreneurs and free enterprises are the most crucial section for economic independence. Mahatma Gandhi always gave priority to revitalizing entrepreneurship right from the grassroots level in India, so that there could be a strong group of entrepreneurs to rebuild and reform India. However, since after independence, Indian economy started to emerge as a mixed economic form of constitution, with a set of regulations, inspectors, guidelines primarily targeting the businesses and entrepreneurs. Even the reforms that took place in 1991 could not

completely eradicate regulatory overburden that bothers entrepreneurs. The Indian entrepreneurship policy framework and start up system has evolved over the past years as one with lots of potential to encourage new venture creation with ease and hustle free procedure. Thus we can rightly say that the current reformed regulatory framework and guidelines is much more entrepreneur and small business friendly, which allows entrepreneurs to run their business with ease. We can also say that an academic work on entrepreneurship contributes not only generation of ideas but also making of the new entity to join the race of the corporate world existing nearby.

An entrepreneur is a person who sees an opportunity in any problematic situation and the solutions which they initiate are focused to improve societal welfare. Entrepreneurs contribute a lot towards economic development by generating employment opportunities and also by creating new markets and new competitions that adds value to the national income. Entrepreneurs brings various changes in the society Entrepreneurs aspires to explore and innovate thing that has the potential to change the world. Their objective is to improve the world through their innovative products and services.

Entrepreneurs also do give back to society by paying regular taxes that help to fund social causes. Entrepreneurs do involve themselves in charities and NGO's that help poor communities to access facilities such as drinking water and health care and Child care etc.

## 10. A Descriptive Study of Socio-Economic Factor that Impact Financial Literacy amongst Youths in Mumbai

**Dr. Jaison Baby Thomas**

Asst. Prof., SVKM's The Mithibai College of Arts, Chauhan Institute of Science & Amrutben Jivanlal College of Commerce and Economics, Vile Parle (West), Mumbai.

---

### **Abstract**

India, over the last ten years, has witnessed rapid growth in its economy. Nonetheless, leniency in investment demand and speculative global environment have constantly posed increasing pressure on the growth of the economy. Singh, (2008) commented that we must not forget that growth is not the only measure of the development. Our ultimate objective is to achieve broad based improvement in the living standards for all our people.

A sufficiently inclusive growth would evidently give birth to an environment leading to an improved standard of living. As a result, a society with improved standard of living would seek the products, goods and services with a higher and acceptable quality and quantity leading to the well-being of materials as well. Hence, growth and broad-based economic development is expected to go parallel in case of Indian Economy Hence, Indian economy's growth must go parallel alongside a broad-based economic development. Planning Commission (Govt. of India, 2003) The study has social significance as findings helps different stakeholders in making policy changes in achieving higher Financial Literacy.

**Keywords** - Financial Literacy, Family Income.

### **Introduction**

Over the last decade, financial literacy has increasingly become important. A developing understanding is being formed that signifies the need of becoming more self-reliant in the future. Considering the earlier generations, there are now a large number of ways to produce and spend the money. Increase in complicated products and developed competition in the industry of financial services has resulted in ill-equipped individuals who struggle to make efficient and effective decisions. Across the world, the inconsistency in the flow of an individual's money is depicted by the changes in the work-life. For a long period, the changing world has used inconsistency in the stream of incoming money. Time interval of high income followed by low income and sometimes no income also exists. Since, in the same period, the state/government is no longer assisting as it did earlier and people are living longer, they need to expand their



provision for retirement, insurance to aid the unforeseen accidents or events and healthcare. Along with these matters, an individual must possess proficient skills to make relevant and proactive financial decisions in order to allow them to self-control the circumstances and to safeguard the financial future.

### **Review of Literature**

Draft Green Paper on Consumer Policy Framework (DTI) (2004) states that more and more consumers are interested in the world behind the products, the production process and the ethics of the company that produces goods and services. Paolucci, (1977) added that the stakeholders are always interested to the extent to which the company is investing in social and related issues. They always want to see company as a going concern. Epstein & Freedman, (1994) assessed the demand for social data by individual investors. The outcomes of this research indicate a strong demand for data about the product safety and quality, and about the company's environmental activities. Furthermore, a majority of the investors surveyed also want the company to report on corporate ethics, employee relations and community involvement.

Chandra & Kumar, (2011) explained that not only professional and contextual sources of data, which include stock brokers, financial consultants and investment advisors, but also contextual factors such as, market share and reputation of the firm, accounting and financial data, publicly available data through various media, advocate recommendation that of brokers, family and friends and personal financial need influence the investment decision of investors. They also found that investors also follow technical analysis, fundamentals (accounting and financial data) and market share of a company while investing.

Literature also examines the correlation between people' demographic and socio-economic factors and their investing decision-making within the context of behavioural finance. Research conducted by Clark and Taylor (2003) has provided data suggesting that women exhibit lower levels of confidence compared to males. Similarly, Chen and Volpe (1998) have found that women had less knowledge in the field of personal finance when compared to their male counterparts. In general, males tend to demonstrate a higher level of confidence when it comes to managing financial matters. According to Taylor (2003), women tend to have a greater inclination towards conservative investment practises. According to Bajtelsmit (1996), According to Kornitiotis and Kumar (2011), age is a demographic variable that influences the investing decisions of investors, particularly senior investors. According to Harrison (2003), the choice of investors to acquire financial goods is typically influenced by their prior investing experience and competence. According to Lewellen (1977), individuals who are younger, have

better incomes, possess higher levels of education, and have fewer family members tend to choose for investments in risky assets rather than conservative instruments.

The decision-making for investment products can be described within the framework of consumer purchase decision-making, which is depicted as a series of steps that include problem recognition, data search, evaluation of alternatives, purchase decision, and post-purchase behaviour Schmidt & Spreng, (1996) Under this framework, data search is one of the critical elements of consumer decision-making W. L. Moore & Lehmann, (1980).

Lusardi & Mitchell, (2007) found that financially underdeveloped families tend to skip the stock market investments with a fear of risk, there is lucid proof to show that services have a higher level of perceived risk when compared directly with products Murray, (1991) Zeithaml (1985) directly and positively links to data search and buying decision. That is, the greater the perceived risk, greater the data search Turley & LeBlanc, (1993), and the adjoined delay in making a purchasing decision. In the literature, there is a consensus, both conceptually and empirically, that a higher degree of perceived risk in a pre-purchase context develop consumers' propensity to look for data about a product or service Dowling & Staelin, (1994). Abdelkarim, (2009) mentioned that the financial data has a purpose to make arrangements the prediction of firm's future cash flows and assist the investors to examine the future securities risk and return; thus, performance prediction should be the center of the financial data.

The significance of data in the pre-purchase decision-making process for customers of financial products and/or services has been well-documented (Friedman & Smith, 1993). The existing body of literature suggests that family is a very reliable source, often seen as more trustworthy compared to friends or professional advisers, such as accountants or financial planners. Furthermore, the participants said that exposure to pertinent television segments, newspaper articles, or radio programmes had stimulated contemplation on their long-term financial prospects.

H0 : There is no significant association between the financial literacy level of students and their Family income.

H1 : There is a significant association between the financial literacy level of students and their Family income.

## **Research Methodology**

### **Participants**

Data was collected from 1390 students from Higher Educational institutions in Mumbai using Convenient Sampling method. Cochran's formula of variability was used to decide the

sample size as the population of students in Higher Educational institutions in Mumbai was not known.

### Questionnaire

A structured questionnaire was used for data collection. Pilot study was conducted on 1390 students in Higher Educational Institutions in Mumbai. Appropriate changes were made in the questionnaire before final data collection.

### Comparison of Family income and financial literacy level

#### Comparison of independent parameters

		Your Family's Annual Income							
		1 to 5		5.1 to 10		10.1 to 15		Above 15	
		Count	%	Count	%	Count	%	Count	%
FL22	Correct answers	346	61.0%	246	71.3%	188	74.0%	170	75.9%
	False Answer	221	39.0%	99	28.7%	66	26.0%	54	24.1%
FL23	Correct answers	242	42.7%	184	53.3%	129	50.8%	127	56.7%
	False Answer	325	57.3%	161	46.7%	125	49.2%	97	43.3%
FL24	Correct answers	224	39.5%	159	46.1%	114	44.9%	120	53.6%
	False Answer	343	60.5%	186	53.9%	140	55.1%	104	46.4%
FL25	Correct answers	311	54.9%	204	59.1%	147	57.9%	141	62.9%
	False Answer	256	45.1%	141	40.9%	107	42.1%	83	37.1%
FL26	Correct answers	200	35.3%	132	38.3%	111	43.7%	91	40.6%
	False Answer	367	64.7%	213	61.7%	143	56.3%	133	59.4%
FL27	Correct answers	162	28.6%	127	36.8%	86	33.9%	74	33.0%
	False Answer	405	71.4%	218	63.2%	168	66.1%	150	67.0%
FL28	Correct answers	317	55.9%	224	64.9%	161	63.4%	165	73.7%
	False Answer	250	44.1%	121	35.1%	93	36.6%	59	26.3%
FL29	Correct answers	305	53.8%	234	67.8%	178	70.1%	153	68.3%
	False Answer	262	46.2%	111	32.2%	76	29.9%	71	31.7%
FL30	Correct answers	378	66.7%	260	75.4%	185	72.8%	167	74.6%
	False Answer	189	33.3%	85	24.6%	69	27.2%	57	25.4%
FL31	Correct answers	116	20.5%	87	25.2%	68	26.8%	61	27.2%
	False Answer	451	79.5%	258	74.8%	186	73.2%	163	72.8%
FL32	Correct answers	242	42.7%	152	44.1%	101	39.8%	112	50.0%
	False Answer	325	57.3%	193	55.9%	153	60.2%	112	50.0%
FL33	Correct answers	317	55.9%	246	71.3%	169	66.5%	165	73.7%
	False Answer	250	44.1%	99	28.7%	85	33.5%	59	26.3%
FL34	Correct answers	164	28.9%	112	32.5%	81	31.9%	70	31.3%
	False Answer	403	71.1%	233	67.5%	173	68.1%	154	68.8%
FL35	Correct answers	222	39.2%	176	51.0%	143	56.3%	156	69.6%
	False Answer	345	60.8%	169	49.0%	111	43.7%	68	30.4%
FL36	Correct answers	251	44.3%	167	48.4%	135	53.1%	124	55.4%

	False Answer	316	55.7%	178	51.6%	119	46.9%	100	44.6%
FL37	Correct answers	309	54.5%	199	57.7%	161	63.4%	137	61.2%
	False Answer	258	45.5%	146	42.3%	93	36.6%	87	38.8%

Source: Data analysis

**Chi-Square test result**

Pearson Chi-Square Tests			
		Value	Interpretation
FL22	Chi-square	25.122	
	D.f.	3	
	P-value	.000*	Significant
FL23	Chi-square	17.284	
	D.f.	3	
	P-value	.001*	Significant
FL24	Chi-square	13.555	
	D.f.	3	
	P-value	.004*	Significant
FL25	Chi-square	4.705	
	D.f.	3	
	P-value	.195	Non-Significant
FL26	Chi-square	5.831	
	D.f.	3	
	P-value	.120	Non-Significant
FL27	Chi-square	7.153	
	D.f.	3	
	P-value	.067	Non-Significant
FL28	Chi-square	23.328	
	D.f.	3	
	P-value	.000*	Significant
FL29	Chi-square	31.990	
	D.f.	3	
	P-value	.000*	Significant
FL30	Chi-square	10.161	
	D.f.	3	
	P-value	.017*	Significant
FL31	Chi-square	6.543	
	D.f.	3	
	P-value	.088	Non-Significant
FL32	Chi-square	5.471	
	D.f.	3	
	P-value	.140	Non-Significant
FL33	Chi-square	33.937	
	D.f.	3	

	P-value	.000*	Significant
FL34	Chi-square	1.545	
	D.f.	3	
	P-value	.672	Non-Significant
FL35	Chi-square	65.417	
	D.f.	3	
	P-value	.000*	Significant
FL36	Chi-square	10.456	
	D.f.	3	
	P-value	.015*	Significant
FL37	Chi-square	6.812	
	D.f.	3	
	P-value	.078	Non-Significant

**Interpretation:** Since p-value for FL32 is **greater than that of 0.05** indicates no significant association between FL32 and Family income. For all other parameter p-value for the chi-square is **less than that of 0.05** indicates significant association and therefore on using rule of majority conclude that one should reject null hypothesis. To be more precise we have tested it by considering overall financial literacy.

#### Comparison of Family income and overall financial literacy level

		Your Family's Annual Income							
		1 to 5		5.1 to 10		10.1 to 15		Above 15	
		Count	%	Count	%	Count	%	Count	%
Overall	Little (< 25%)	127	22.4%	47	13.6%	36	14.2%	24	10.7%
	Moderately (25% - 50%)	250	44.1%	128	37.1%	104	40.9%	68	30.4%
	Sufficient (50% - 75%)	137	24.2%	115	33.3%	68	26.8%	94	42.0%
	Absolutely (75% & <)	53	9.3%	55	15.9%	46	18.1%	38	17.0%

Source: Questionnaire.

#### Chi-Square test result

		Value
Overall	Chi-square	60.712
	D.f.	9
	P-value	.000*

Source: Data analysis

**Interpretation:** Since p-value is less than that of 0.05 indicates significant association between Family income and overall financial literacy level therefore we do reject null hypothesis and conclude that there is a significant association between the financial literacy level of students and their Family income. The hypothesis is even confirmed using spearman's rank correlation. The outcomes follow:

#### **Spearman's rho test result**

			Overall
Spearman's rho	Your Family's Annual Income	Correlation Coefficient	.182**
		p-value	.000

Source: Data analysis

**Interpretation:** Since p-value is less than that of 0.05 indicates significant association between Family income and overall financial literacy level therefore we do reject null hypothesis and conclude that there is a significant association between the financial literacy level of students and their Family income. The observed spearman's correlation value is 0.182, which is positive and significant indicates that the higher the family income more the financial literacy.

#### **Findings of the Study**

The p-value of chi-square test is less than that of 0.05 which indicates significant association between Family income and overall financial literacy level therefore conclude that there is a significant association between the financial literacy level of students and their Family income.

#### **Conclusion**

Based on data analysis some conclusions are presented as under.

All the respondents (students) do not understand the basics of investments and its calculation.

From the analysis of financial literacy questions, it is also found that the majority students are less financially literate on some of subjects of financial literacy and even some of them do not understand the important concepts at all.

Further, students bellowing to lower social-economic background have lesser financial knowledge, due to lesser exposure to different financial products and hence extra care and efforts needs to be taken by the authorities and policy framers for promoting financial knowledge among the social and economic weaker section of the society.

**Limitations of the Study**

In the study, all the respondents (i.e. students) were from urban areas of Mumbai Western Suburbs. It may be possible that the views of respondents from rural areas turn out to be different from the respondents belonging from urban areas.

**Bibliography**

1. Aghevli, B. B. (1990). The Role of national saving in the world economy : recent trends and prospects. International Monetary Fund.
2. Ajzen, Icek., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. 278.
3. Alba, J. W., & Hutchinson, J. W. (2000). Knowledge Calibration: What Consumers Know and What They Think They Know. In JOURNAL OF CONSUMER RESEARCH, Inc. • (Vol. 27).
4. Bianculli, David. (1992). Teleliteracy : taking television seriously. Continuum.
5. Boadway, R., & Wildasin, D. (1995). Taxation and Savings: A Survey. In Fiscal Studies (Vol. 15).
6. Bronfenbrenner, U. (1979). The ecology of human development : experiments by nature and design. Harvard University Press.
7. Burnet, M. (1965). ABC of Literacy. United Nations Educational, Scientific, and Cultural Organization, Place de Fontenoy, Paris-7e, France.
8. Dellavigna, S. (2009). Psychology and economics: Evidence from the field. Journal of Economic Literature, 47(2), 315–372. <https://doi.org/10.1257/jel.47.2.315>
9. Furnham, A. (1999). The saving and spending habits of young people. Journal of Economic Psychology, 20(6), 677–697. [https://doi.org/10.1016/S0167-4870\(99\)00030-6](https://doi.org/10.1016/S0167-4870(99)00030-6)
10. Lusardi, A., & Mitchell, O. (2009). How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness (NBER working paper No. 15350). <https://doi.org/10.3386/w15350>
9. Lusardi, A., & Mitchell, O. S. (2006). Financial literacy and planning: Implications for Retirement Wellbeing (Working Paper 17078).

# 11. Emerging Trends in Service Sector Industry and Contribution of Hotel Industry in Economic Development of India

**Mr. Hardik Goradiya**

Research Scholar, Ramanand Arya DAV College, Bhandup, Mumbai.

**Dr. G. D. Giri**

Research Guide, Ramanand Arya DAV College, Bhandup, Mumbai.

---

## **Abstract**

The Hotel industry in India has evolved remarkably over the decade and in effect parading quite a wide spectrum of benefits and opportunities for players of the service industry. The industry is statistically proven to have performed creditably countrywide and among its major cities. It is considered to a larger extent that the hotel industry flourishes on the wings of the tourism Industry. The Hotel and Tourism sector is considered among the top ten sectors in India. As a result of its contribution, the Hotel and Tourism sector attracted around US\$ 9.2 billion of FDI between April 2000 and March 2016 as released by the Department of Industrial Policy and Promotion (DIPP). The demand for travel and tourism in India is expected to grow annually by 8.2% which is expected to put India third in the world. Travel and tourism in India also accounted for 49,086,000 jobs in 2010 (about 10% of total employment) and is expected to rise to 58,141,000 jobs (10.4% of total employment) by 2020. According to the Economic Survey of India the Indian Hotel industry accounts for USD 17 billion, 70% (USD 11.85 billion) which take their origin from the unorganized sector and the remaining 30% (USD 5.08 billion) from the organized sector. In 2000, India hosted only 2.6 million international visitors. By 2009, the figure had already increased to 5.13 million arrivals. Over the years, a sustained increase in the tourism industry with increase in the number of foreign and domestic tourists has served as a booster to the Hotel industry. This study makes an exploratory attempt to study the Hotel industry as it relates to India and analyzes its contributory effects on the economy on the heels of the various reforms that have hit the country. The objectives of the study are to analyze and assess the performance of the Hotel Industry in India and to identify the challenges and setbacks of the industry. It was concluded that India's hotel sector has unequivocally entered the next up-



cycle with impressive performance suggesting that players of the industry have the onerous responsibility and duty to capitalize on this and make the best out of the industry.

**Keywords:** Hotel, Industry, Economic reforms, Contributor, Tourism, Performance, Challenges.

### **Introduction**

The economy of India continues to undergo various reforms in the bid to position the country among great nations capable of meeting the everyday needs of its citizenry. In the light of this, it is very crucial to make sure the various sectors are up and running. This study basically looks at how the Hotel industry is contributing its quota to these economic reforms. The Travel and Tourism sector of the Indian economy is rigorously undergoing its fair share of sustained growth rate. As a major interlinking industry, the Hotel industry has also had to experience a ripple effect of this all important growth which is very crucial to India's economic prospects. As a result of its contribution, the Hotel and Tourism sector attracted around US\$ 9.2 billion of FDI between April 2000 and March 2016 as released by the Department of Industrial Policy and Promotion (DIPP).

### **Objectives**

1. To Identify and Analyze Emerging Trends in the Service Sector.
2. To Examine the Economic Contribution of the Hotel Industry:
3. To Investigate the Impact of Changing Consumer Preferences
4. To Evaluate Sustainability and Responsible Tourism Practices.
5. To Analyze the Role of Policy and Regulation.

### **Hypothesis**

#### **Hypothesis 1**

There is a statistically significant relationship between emerging trends in the service sector in India and the overall economic performance of the sector.

#### **Hypothesis 2**

The hotel industry in India makes a substantial positive contribution to the country's GDP and employment levels.

#### **Hypothesis 3**

Changing consumer preferences and demands significantly influence the strategies and operations of the hotel industry in India.

#### **Hypothesis 4**

The adoption of sustainability and responsible tourism practices within the Indian hotel industry positively affects its economic outcomes and overall growth.

#### **Hypothesis 5**

Regulatory and policy challenges have a statistically significant impact on the growth and development of the hotel industry in India.

#### **Review of Literature**

Hotel is often referred to as a 'home away from home'. It is a place where the tourist pauses being a traveler and becomes the quest. The enormous increase in tourism of the 20th century has caused the hotel business to outgrow national boundaries and become global in character. Hotels are directly linked to and are integral part of many other economic activities. The hotel industry is indispensable for the success of tourism. It is said, "no hotels, no tourism" (Kannan, 2005).

According to Srinibas (2015), the Hotels & the Catering Industry started in the 19th century with the development of major cities, easier sea travel & the development of railways. Srinibas (2015) added that in India, resting houses called serais/sarais and dharamshala were established on highways by kings and emperors of ancient and medieval periods.

#### **Performance of the Hotel Industry**

Sharing his opinions, Lamda (2017) expressed that as far as hotel real estate transactions in India go, 2017 has started off with a big bang. After a relatively quieter 2016, this year saw the acquisition of a majority stake in India's foremost hotel management company, Sarovar Hotels, by The Louvre Hotel Group (part of Jin Jiang International Holding), he added.

This transaction alone has paved the way for 2017 to set a new record in India's fledgling hotel transactions' market. The last significant year for the hotel transaction market was 2015, in which the market witnessed over INR 24,233 million worth of trade in existing and brownfield hotel assets – a 44.8% increase over the second-highest year of 2012, which had witnessed nearly INR 16,730 million worth of trade.

#### **Hotel Industry in the Nineteenth Century**

The British introduced hotels in India mainly for their own use or for foreign visitors. There are references about the Race Banquet held at Bombay Hotel and Tavern in 1799 and the dinner at the Maclean's Hotel to commemorate the capture of Srirangapatnam in 1800. The

existence of Auckland Hotel was as far back as 1843 and was later renamed as the Great Eastern Hotel in 1858. In 1871 John Wakson, who had earned a huge fortune as silk draper, opened his Esplanade Hotel. By the end of the nineteenth century there were many western style hotels in the South, like Imperial, New Woodland, Ashoka Oceanic, Savera, Esplanade, Pandyan, Bangalore International, Ritz Dasaprakash, etc. **(Kannan, 2005)**.

### **Hotel Industry in the Twentieth Century**

The twentieth century was a turning point in the history of the hotel industry in India. It is in this century we find the real growth and development of the accommodation industry. The Indian Hotel Company, Bombay was incorporated on 1st April 1902 with an authorized capital of Rupees thirty Lakhs. Mr. Jamsetji Tata opened the Taj Mahal Hotel in Bombay. The hotel was completed at a cost of ₹5,00,000 in 1904 but Tata did not live to preside at the opening ceremony. In 1912 Spencers entered into the hotel industry by purchasing Connemara Hotel and opened at Bangalore the West End Hotel and Malabar Hotel at Cochin and Mascot Hotel at Kothagiri in 1942 and Savoy Hotel at Ootacamund in 1943 **(Kannan, 2005)**.

### **Analysis Method**

This Research Paper is based on Secondary data collected from various sources like Government reports, Industry reports, Academic Journals, Corporate reports etc.

### **Findings, Challenges, Suggestions and Setbacks of the Hotel Industry**

Despite the overwhelming performance of the Hotel Industry in India over the past five years, mention can be made of the numerous challenges and setbacks that have dragged the industry from attaining its desired output. It can be observed that Hotels survive and continue to exist in business by the patronage of its paying guests and the products they (Hotels) offer. This is reiterated in the words of Kashyap (2014) that no matter how magnificently any hotel is built, its revenue flows from the number of guests staying in the hotel's room or utilizing any other services of hotel like its restaurants, bar, banquets, conference halls, spa, gym, beauty salon, swimming pools etc.

In his views, **Kashyap (2014)** makes mention of the following major factors as huge challenges and setbacks to the Hotel Industry in India.

### **Taxation Policies of the Government of India**

Over the last two years, average room rates have definitely reduced and occupancy has been stagnant," said SM Shervani, president of the Federation of Hotels and Restaurant

Associations of India (FHRAI) as reported by Khosla & Sathyanarayanan in 2014. In India, hotels are taxed anywhere between 20% and 25% depending on the state that they are operating in, when other Asian countries are levying 8-10%. “We welcome competition in any form, but this kind of disparity is unhealthy for the industry. It is almost as if we are doing our business with our hands tied” said Dilip Datwani, President (HRAWI) – The Economic Times, 2017.

#### **Debt-funding by the Indian Banks**

HVS India in September 2013 researched the lending parameters prevalent in select other countries of the world for hotel debt-funding and compared them to the prevailing conditions in India. Expectedly, it was found that in cities such as New York, London, Dubai and Moscow, the term period of the loan ranges from 20-30 years, with interest rates of 5-7%. In other cities such as Beijing and Buenos Aires, while the length of the loan term is around 10 years, the interest rate is in the range of 9-10%.

#### **Visa Issues**

According to Vivek Nair 2014, India was able to attract a mere 6.85 million foreign tourists in 2013, ranking 41st in the world. It is indeed disappointing to compare this performance with some of our competing destinations: Singapore –15.5 million, Malaysia –25.7 million, Thailand –26.7 million and Turkey –35.6 million. “Over the years, the onerous visa application process which has always been fraught with long delays, excessive documentation, and outdated bureaucratic procedures have had to deter potential tourists.

#### **Safety and Security**

Shweta Ramsay in 2014 has reported that, since the 26/11 attack the hospitality industry has continuously been fighting with every challenge in respect to terrorism and other security risks by adapting to new technologies and training the security personnel and other employees as well. Today, there is a sea change in terms of security to protect guests and property from any kind of damage.

#### **Conclusion**

Hotels are the vital and essential component of the tourism industry. They are the keynotes in the arch of global tourism. It is a miniature country representing to the tourist from distant, far-off lands, the feel and flavor of a country’s cuisine, culture and its way of life. Without the adequate development of hotel resources, all the national scenery, all the climatic virtues and all the sporting and recreational facilities do not suffice to sustain a good volume of

tourist trade. The persuasive influence of travel and tourism, the infiltration of national and international attitudes and increasing leisure associated with higher income groups has made the environment more conducive for the growth of hotels.

India's hotel sector has now unequivocally entered the next up-cycle. Prudent, measured, yet assertive decision making by the industry's stakeholders is now required. The only thing worse than a bad decision is taking no decision! It is therefore concluded with the hope that hotel owners, operators, lenders and advisors will all jointly appreciate the opportunity ahead and make decisive plans to capitalize on it as the industry has quite a spectrum of benefits not only to the government and the nation but also to the private sector.

### References

- EquityMaster (Retrieved from <https://www.equitymaster.com/research-it/sector-info/hotels/Hotels-Sector-Analysis-Report.asp>)
- Kashyap, G. (2014). Challenges faced by the Hotel Industry: a review of Indian Scenario. *Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 9. Ver. I (Sep. 2014), PP 69-73.
- Kannan, S. (2005). *Hotel Industry in India*. Deep and deep publication PVT. Ltd. Pp 17- Khanna, A. Chopra, D. (2016) *Hotels in India Trends and Opportunities*. HVS.com
- Lamda, M. (2017). After big-bang start, year set to see 10-12 more hotel deals in 1H2017(Retrieved from <http://jllapsites.com/real-estate-compass/2017/02/2017-india-hotel-industry/>)
- Shweta Ramsay, June 2014, in cover story is hotel Safety & Security priority today? In *Hospitality Biz India .com* for the hospitality professionals. <http://www.hospitalitybizindia.com/printArticle.aspx?sid=5&aid=19448>
- Srinibas, S. (2015). Introduction and Growth of Hotel Industry in India. (Retrieved from <http://sasmitasrinibas.blogspot.in/2015/09/introduction-growth-of-hotel-industry.html>)
- Steffi J. (2016). *Hotels & Hospitality Industry* (Retrieved from <http://info.shine.com/industry/hotels-hospitality/12.html>)

## 12. Waste Management - A Project with Mumbai Municipal Corporation

**Adv. Rajeev Karkhanis**

Asst. Professor, Ramanand Arya DAV College, Bhandup (E), Mumbai.

---

### **Introduction**

The topic of the research paper is Waste Management – An actual project taken up with Mumbai Municipal Corporation for Mumbai City. The researcher has put forward the following details in the research paper.

### **Waste generation in Mumbai - background**

The waste management is a growing concern that is experiencing a rapid transformation as a result of the use of technology and the changing demands modern economy. This research paper explores the waste management, its current state, and the trends in future with reference to Coconut waste in Mumbai region/ City.

### **Facts & Future Avenues of Waste Management**

Brihanmumbai Municipal Corporation's (BMC) own statistics for 2022 show the city generates about 6,400 tonnes of solid waste daily. Of this, 73% is 'wet' or food waste. The remaining 27% – roughly 6.3 lakh tonnes every year – comprises all kinds of dry waste. The Waste management is a multi-billion-dollar industry that is expected to grow in the coming years. The global market for waste management is expected to grow at a CAGR of 3.4% between 2021 to 2030. To have a safer environment, modern society needs responsible disposal of waste generated by businesses, households, and individuals.

### **Presenting a real case of a Project in Mumbai**

The researcher has himself done an actual case study for doing research on the above subject. The case is a study about collection of Waste Coconut generated in Mumbai (Urban and Sub urban area) and reuse it in making of various end use products. The collection & logistics would be done by Mumbai Municipal Corporation. After the waste is collected it shall be converted into various usable products generating good revenue, thereby making it a proper commercial project.

**Conclusion**

A critical study of the real life case enumerates that if the Coconut waste is collected through government help for logistics, applying expertise knowledge, then it can be turned into a successful Commercially viable project.

**Objective**

The research paper envisages the aim of providing effective and practical solution of Coconut waste in Mumbai, using/ invoking Municipal intervention to collect such waste and convert it into usable products, which will make it a commercially viable project.

**Hypotheses**

The Quantity of Coconut waste generated in Mumbai is very high and with the help of government / Municipal authority for collection and logistics, the waste can be used to make by products and such project is commercially viable.

**Data Collection**

The waste management has undergone significant changes in recent years due to the increasing use of technology in manufacturing process . Waste management companies have played a critical role in this transformation by providing innovative solutions that convert waste into usable products. Waste Management refers to the process of evaluation of waste, training, and use of technology to benefit stakeholders.

Typically, coconut husks are used to improve potting soil or as an efficient ground cover for little plants in the garden. The husks can also be used to make a variety of folk-art items, such as masks, simple but decorative boxes, and even imaginative picture frames. The tender coconut shells have multiple reuse cases. For instance, they can be used to make low-cost, eco-friendly, DIY hutments or can be shredded and converted into mulch to protect the trees from erosion and harsh weather especially on hilly terrain. This indiscriminate disposal of coconut husks also contributes to drainage obstruction, flooding, and sometimes leads to fire outbreaks.

The daily average volume of coconut husk waste generated by coconut vendors within the Mumbai Municipality is about 250 tons, according to the Coconut Waste Project baseline report, 2021. In urban cities such as Delhi and Bangalore, there is a major challenge of solid waste management grappled by the metropolitan, municipal, and district assemblies. These challenges range from the indiscriminate disposal of plastics to organic waste such as papers and food. Part of the solid waste generated within urban cities, especially in the Southern part of

Mumbai, is coconut husk waste. The responsibility of sustainable disposal of coconut husk is heavy on coconut vendors. This is as a result of the absence of the requisite infrastructure to safely manage coconut waste at their level. Moreover, there has not been enough private and public sector investments in transforming coconut husk into useful products.

Many coconut vendors dispose their waste indiscriminately at inappropriate places such as markets, roadside, bushes, and in gutters. Some food vendors also choose to burn the coconut waste husk as a source of fuelwood, which contributes to the release of greenhouse gases such as carbon dioxide into the atmosphere. This indiscriminate disposal of coconut husks also contributes to drainage obstruction, flooding, and sometimes leads to fire outbreaks. Some community folks also use the husk to fill potholes created on roads in some urban communities in Accra. The world is at the time where the rate and magnitude of climate change is of serious concern to all.

Coconut water is known to have a lot of health benefits and some people even like to have it daily (in moderation). Not only this, a fully mature (brown) coconut is also used as offering to the Gods in temples, especially in the Hindu culture in India. So, **what happens to the coconut shells and husk afterwards?** For the tender coconuts, it is a common site for the coconut vendors to pile them nearby owing to lack of established infrastructure to recycle them despite them being clearly classified as dry waste. As for the mature coconuts, owing to the religious sentiments attached, sooner or later they end up in landfills as people refrain from throwing them in dedicated bins for dry waste recycling.

### **Primary Data**

Interviews with more than 150 Coconut vendors in Mumbai;

1. How much waste do you generate per day ?

Approx 200 kgs

2. Do you get any help from Municipal authorities for disposal?

NO

3. Where do you throw the waste?

Near any free area

4. Is it easy to dispose waste?

No. It take a lot of labour to throw the waste. IN fact the Municipal authorities threaten us not to throw it in Dust Bins. They sometimes fine us and take bribe.



We are not doing any Illegal activity, then why is there no legal provisions for hard working people like us ??

5. Then how you manage disposal?

With great difficulty and a lot of labour time with no returns

6. Will you be happy if we collect waste from you?

Sir, We will treat you like god !!

### **Interviews with authorities of Municipal Corporation in Mumbai**

The researcher has conducted meetings with many authorities of Municipal authorities and given written representations regarding collection of Coconut Waste from all parts of Mumbai. The Municipal has shown willingness to help us in the same by collecting the waste separately and storing it in a central place. After the waste is stored in a central place, it will be handed over. This will be done at free of cost under a project of sustainable activity.

### **Statistics**

#### **Project Summary;**

Investment : Rs 25 lakhs (Including machinery, Rent for place and labour)

Manufacturing per month : 150 tonnes of cocopeat.

Sales Qty per month : 1,50,000 kgs

Sales Value : Rs.12,00,000 (1,50,000 X 8)

Profit (per kg) : Rs 1 Approx

Profit per month : Rs 1,50,000

Annual sales Value : 18,00,000

Returns on Investment : 72 % (Approx)

### **Analysis and Method**

The researcher has taken a real life case study. The Researcher has made a project which he has already communicated to the Municipal Corporation of Mumbai directly. The details become authentic. Researcher has taken all the practical facts into consideration along with interviews of 150 Coconut vendors in Mumbai, interviews with Municipal authorities and compiled the details in this Research paper. The Researcher has also given details of an actual company which is doing the above activity.

### **Case Study of An Actual Company**

The real case taken of a company for the purpose of this research is as under ;

Name	:	Bharat Agritech Pvt Ltd.
Address	:	G-32, Old MIDC, Latur 413512, Maharashtra, India
Estd.	:	May 2016
Mobile No	:	9423368301
Turnover	:	1.60 Crore per annum.

### **What is Bharat Agritech?**

This company is into Coco coir coco peat making machine, coconut fiber extraction machine from "Bharat Agritech" This machine shred tender coconut as well as coconut husk and separate clean coir and peat. This coconut coir making machine is also known as coconut peat making machine as well as coconut fiber extracting machine. By separation of liquid out of peat, this peat can directly use for plants. Liquid separated out of this is containing high quantity of Nitrogen, Potassium, Sodium and many micro nutrients. In dilute condition, it can be use as a liquid fertilizer. By making coir sheet, it can be use as a replacement of mulching paper which is use in agriculture sector for weed controlling.

### **Project / Case Study of the Researcher**

The Researcher claims that the details which he has put forward is not just a case study but a readymade Business Project that can be implemented. The case study or Project of the Researcher is as under;

#### **The Idea**

It drives everything about the company, from what products and services are offered to how these products are marketed. This idea doesn't need to be unique, but it must have the potential to capture part of its target market. It drives everything about the company, from what products and services are offered to how these products are marketed. The Idea is to make various commercially usable products from Coconut Shell.

The mature (brown) coconut shells can be recycled and converted to activated charcoal. Some companies like the ArSta Eco and the Sustainable Green Field Enterprise (SGFE) have come up with an innovative technique to convert coconut shell into charcoal to curb the environmental pollution caused by burning wood for fuel. Often in the backward communities, the fire stove lit with wood sticks is a common source of heat for cooking. This combined with the need to recycle coconut shells can be solved jointly by converting the shells into eco-friendly

charcoal. For this, the shells are dried, sifted and combined with other raw materials. Then, they are efficiently carbonized at 300–500°C for 3–5 hours, crushed, mixed and shaped into a convenient and efficient size, and finally dried to guarantee high performance. Aside from this, the coconut shell can also be used for making eco-friendly craft items or bowls.

Products to be made: Cocopeat, Coir strings, Bio gas for heating.

The coconut husk a.k.a., coir or coconut fibre is the outer “hairy” coating of the coconut especially visible in the mature (brown) coconut. The husk of the coconut consists of very strong fibres and hence, can be converted into value-added items like ropes, bio-degradable chairs and erosion control matting.

### **Investment**

Investment is the ability to devote time, energy or resources toward a specific outcome that benefits you in the future. It can help you decide what technologies you need to provide your services, develop lesson plans and manage your time, energy and effort to help you define student learning goals.

The Investment required is approximately 15 lakhs. (Only Machinery)

The Sales value per kg of cocopeat is Rs 8.

### **Strategy**

The strategy is to use the Government (Municipal Corporation of Mumbai) infrastructure for Collection, assembly and transport of Coconut shells from all parts of Mumbai to a central location in Mumbai. This will give the project a clear advantage of no cost raw material.

### **Technology**

Technology plays a major role in the success of any business. The technology used shall be the advanced machines and know how used by Bharat Agritech who have successfully run this business for the past 8 years.

### **Findings**

The Waste management is a dynamic and growing sector that is undergoing significant changes as a result of technological advancements and changing economies. The project of Coconut waste collection and making Cocopeat ect is definitely a viable and profitable project. It is not only commercially viable, but also solves a major problem of huge Coconut waste by recycling the same, hence creating value from waste. At present this waste generated all across Mumbai is to the tune of 200 tonns per day, is thrown in dust bins.

**Acknowledgement**

The researcher acknowledges the support of Municipal Authorities for giving formal permission to present his case and extend their support for collection of waste free of cost.

**Suggestions**

The researcher wishes to suggest Municipal Corporation to improve its waste collection methods that will improve the waste problem at ground level. To make this project successful it will require active participation of Municipal corporation, a robust cost effective collection system, efficient manufacturing systems/ processes.

**Conclusions**

The project of Coconut waste collection through municipal authority intervention and making Cocopeat ect is a viable and profitable project and hence the hypothesis is proven positively.

**Wiblography**

- [https://www.google.com/search?q=waste+generation+in+mumbai&rlz=1C1FHFK\\_enIN963IN963&oq=waste+generation+in+mumbai&aqs=chrome..69i57j0i13i512j0i390i650l4.5121j0j15&sourceid=chrome&ie=UTF-8\)](https://www.google.com/search?q=waste+generation+in+mumbai&rlz=1C1FHFK_enIN963IN963&oq=waste+generation+in+mumbai&aqs=chrome..69i57j0i13i512j0i390i650l4.5121j0j15&sourceid=chrome&ie=UTF-8)
- <https://timesofindia.indiatimes.com/city/mumbai/tender-coconut-shell-garbage-to-turn-into-gold-at-reay-road-crematorium/articleshow/68446494.cms>
- <https://cerathdev.org/coconut-husk-a-waste-or-a-raw-material/>
- <https://medium.com/planet-rescue/how-to-recycle-tender-and-mature-coconuts-8f5c5cae9b2>

## **13. A Systematic Review on the Relationship between Work Life Balance, Job Satisfaction and Employee Commitment**

**Dr. Poonam Naresh Kakkad**

Assistant Professor, Nirmala Memorial Foundation College, Kandivali.

**Ms. Naveena Suresh**

Assistant Professor, Sree Narayana Guru College of Commerce, Chembur, Mumbai &

Research Scholar, Ramanand Arya DAV College, Bhandup, Mumbai.

---

### **Abstract**

This research paper aims to systematically review the relationship between three important concepts in Human Resource Management which are Work life balance, Job satisfaction and Employee Commitment. The study aims to unearth research gaps which may lead to possible research in the future. The authors have referred around 100 research papers and only those which has observations with respect to any kind of relationship between work life balance, job satisfaction and employee commitment have been cited here. The various concepts that have contributed significantly by various researchers have been discussed here.

**Keywords :** Work life balance, Job satisfaction, Employee Commitment.

### **Objectives**

1. To conduct a systematic review to understand the relationship between Work life balance, Job satisfaction and Employee Commitment.
2. To identify the sectors where these studies have been conducted.

### **Hypotheses**

There is a significant relationship between work life balance, job satisfaction and employee commitment across industries.

### **Data Collection**

This study is based purely on secondary research and is a working paper.

### **Statistics**

Data was arranged and analysed in a tabular form.

### Analysis Methods

The review undertook different steps like Identification of the journals and resources, Screening them, Scrutinising the articles, and Reviewing.

In this review, 100 different research papers were reviewed belonging to the 3 different concepts taken separately for the study. Then 15 papers were identified for this research paper to understand the relationship between the different concepts.

### Studies Linking Work life Balance, Job Satisfaction and Employee Commitment

S. N.	Author/Title	Year	Journal	Methodology Of Data Collection	Sample Size	Observation
1	Rani et al/ Work/life balance reflections on employee satisfaction	2011	Serbian Journal of management	Both Primary and Secondary	210	Findings showed that the key element that positively correlates with employee job satisfaction in the organisation is work-life balance.
2	Lauren et al/ The Effects of Perceived Supervisor Work-Life Support on Employee WorkLife Balance, Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behavior	2013	University of Wisconsin-Stout, Graduate School	Both Primary and Secondary	132	It was predicted that perceived coworker and supervisor support would be positively related to perceptions of work life balance, job satisfaction, organizational commitment, and organizational citizenship behaviours
3	Chandrasekhar/ A study on work life balance among the executives in IT industry with special reference to Technopark in Trivandrum, Kerala	2013	Asian Journal of multidisciplinary research.	Both Primary and Secondary	305	Significant positive relationship between work life balance and job satisfaction.
4	Bushra Arif et al/ Impact of Work Life Balance on Job Satisfaction and Organizational Commitment Among University Teachers: A Case Study of University of Gujrat, Pakistan	2014	International Journal Of Multidisciplinary Sciences And Engineering	Both Primary and Secondary	171	The correlation result shows that significant positive relationship exists between work life balance and job satisfaction of university teachers. The Pearson correlation results also indicate that there is positive

						relationship exists between work life balance and organizational commitment of university teachers.
5	Yadav & Dabhade/ Work Life Balance and Job Satisfaction among the Working Women of Banking and Education Sector - A Comparative Study	2014	International Letters of Social and Humanistic Sciences.	Both Primary and Secondary	150 (75 each from both the sector)	According to this study, work-life imbalance makes employees less satisfied with their jobs. Personnel in the education industry have a better work-life balance than those in the banking sector.
6	Syed Mohammad Azeem et al/ The Influence of Work Life Balance and Job Satisfaction on Organizational Commitment of Healthcare Employees	2014	International Journal of Human Resource Studies	Both Primary and Secondary	275	Significant relationship is found among work-life balance, job satisfaction and organizational commitment.
7	Abigail & Oluwatobi/ Job satisfaction and organizational commitment among library personnel in selected libraries in Ogun state, Nigeria	2015	Information and Journal management	Both Primary and Secondary	34	It was observed that irrespective of many demographic variables, the quench for satisfaction and commitment was the same. There was a significant positive relationship between job satisfaction and employee commitment.
8	Hsiao, A./ Minorities' job satisfaction and organisational commitment in hospitality industry.	2017	International Journal of Culture, Tourism and Hospitality Research	Both Primary and Secondary	305	Indigenous employees reported significantly higher levels of job satisfaction than did non-indigenous employees and Female employees ranked organisational commitment significantly higher than male employees.
9	Ganapathi et al/A study on Work life balance of	2017	International Journal of	Both Primary and	100	Respondents were able to maintain a work life

	employees in IT sector in Chennai		Technical Research & Science	Secondary		balance and they feel having proper work life balance increases the commitment towards the organization.
10	Khalid et al/ Relationship between Work-life Balance and Employee Commitment among professionals in Nigeria: A study on radio Journalists in Kano	2018	The International Journal of Business and Technopreneurship.	Both Primary and Secondary	169	The study discovered a statistically significant correlation between Work-life Balance and Employee Commitment.
11	Mohapatra et al/Organizational commitment and job satisfaction in information technology sector.	2019	International Journal of Innovative Technology and Exploring Engineering	Both Primary and Secondary	233	Regression analysis findings reflected that affective, normative and continuance commitment had a significant influence on job satisfaction. The study concluded opining that an increase in all 3 different types of commitment will result in an increase in job satisfaction.
12	AKM Talukder/Supervisor Support and Organizational Commitment: The Role of Work-Family Conflict, Job Satisfaction, and Work-Life Balance	2019	Journal of employment counselling	Both Primary and Secondary	305	The results show that both work-life balance and job satisfaction are positively related to organizational commitment.
13	Subooh Yusuf and Ali Sajid/ Impact of work life balance on life satisfaction among Qatar Police personnels.	2019	Iaetsd Journal For Advanced Research In Applied Sciences	Both Primary and Secondary	100	A favourable relationship between work-life balance and life satisfaction among the respondents was found as per the study.
14	Kasbuntoro et al/ Work-life balance and Job satisfaction: A case study on Employees on Banking companies in Jakarta	2020	International Journal of Control and Automation	Both Primary and Secondary	450	The study had concluded that employee job satisfaction highly depends on work-life balance factors in the organization
15	Nancy Yusnita et al / The	2022	Jurnal Economica	Both Primary	210	The results showed,



	Role of Work-Life Balance and Job Satisfaction as Predictors of Organizational Commitment			and Secondary	there was a positive effect of job satisfaction on organizational commitment; a negative effect work-life balance on organizational commitment; a positive effect of work-life balance on job satisfaction; a positive effect of work-life balance on organizational commitment through job satisfaction
--	---	--	--	---------------	--

### Findings

The findings are as follows based on the review of literature undertaken by the authors: -

- Only those papers post 2010 have been considered which are written in English language.
- The studies pertaining to the title is found being conducted in various industries and service sectors like banking, education, information technology etc.
- The significance of conducting these studies is relevant always since its deals with the human assets of the organisations.
- The research papers referred by the authors have seen conclusion which indicate a significant relationship between work life balance, job satisfaction and employee commitment.

### Suggestions

This review holds considerable significance for various stakeholders, including employers, employees, researchers, and policymakers. Understanding how work-life balance, job satisfaction, and employee commitment intersect can inform the development of strategies to create healthier, more productive work environments, enhance job satisfaction, and foster greater employee commitment. Ultimately, this knowledge contributes to the well-being and success of both individuals and organizations in today's dynamic work landscape.

**Conclusion**

There has been quite a huge literature with respect to studying of work life balance, job satisfaction and employee commitment. In many organizations human resource managers evaluate personnel practices to increase employee loyalty towards the organization. In addition many organizations have begun to take a role in developing quality of work-life programs. Understanding the relationship between employee job satisfaction, WLB and organizational commitment give basis for future research and provide benefits to organization and individual. These concepts have been studied across various sectors like information technology, education, banking etc.

In conclusion, work-life balance (WLB), job satisfaction (JS), and employee commitment (EC) are intricately linked and play pivotal roles in shaping the overall well-being of employees and the success of organizations. These factors form a complex web of interactions, where improvements or challenges in one area can impact the others. A harmonious relationship between WLB, JS, and EC is essential for creating a thriving and sustainable work environment. Employers should prioritize these factors by implementing policies and practices that support WLB, recognize and address sources of job dissatisfaction, and cultivate a culture of commitment and engagement. A well-balanced focus on these three elements can lead to a happier, healthier, and more committed workforce, resulting in improved organizational performance and success.

## 14. Challenges and Benefits for Students in Digital Transformation in India

**Mr. Vishanlal L. Gupta**

Assistant Professor, Department of Economics, Chandrabhan Sharma College, Powai, Mumbai.

**Sudhir S. Godi**

Assistant Professor, Department of Economics, R. A. D. A. V. College, Bhandup, Mumbai.

---

### **Abstract**

Digital transformation is the process of using digital technologies to create new or modify existing business processes, culture, and customer experiences to meet changing business and market requirements. This reimagining of business in the digital age is digital transformation.

It transcends traditional roles like sales, marketing, and customer service. Instead, digital transformation begins and ends with how you think about, and engage with, customers. As we move from paper to spreadsheets to smart applications for managing our business, we have the chance to reimagining how we do business how we engage our customers with digital technology on our side.

As they embark on digital transformation, many companies are taking a step back to ask whether they are really doing the right things

**Key words :** Regional development, Economic Growth, Infrastructure, institutions, knowledge, ethics, teaching enrichment programs, Service, Children, Youth, Competent.

### **Introduction**

India is rapidly moving towards the revolution in the educational sector fuelled by the pandemic era. Surely, it is the widespread acceptance of digital education among students, academicians, and parents. Digital transformation of education in India is the new normal and a phenomenal breakthrough. The steps that education facilitators take in the digital space will change the face of learning for decades to come. Moreover, we have a larger rural population who have the urge to access higher education. They hustle invariably to do so and yet many miss out on higher education with the traditional system. Naturally, the pressure is more on the digital infrastructure to ensure quality higher education to all.

India globally ranks second after china in adopting digital transformation. So, India is the second-largest in the world to have the highest number of internet users. This stands out as a great opportunity for us. Because digitized sectors create and add more value to the various

facets of education, healthcare, technology, and so on. How? It is simple, digitization enables widespread accessibility and life-long preservation of resources. Books, to be precise can stay as it is in the cloud forever, unlike the physical books. And with so many people having access to the internet education comes to the seekers unlike the other way round.

### **Objectives**

Objectives of research for digital transformation for students

The objectives of research related to digital transformation for students can encompass various aspects of improving education through technology. Some key objectives include:

#### **Effectiveness Assessment**

Evaluate the impact of digital transformation initiatives on student learning outcomes, engagement, and overall educational experience.

#### **Pedagogical Innovation**

Research innovative teaching methods and strategies enabled by digital tools, aiming to enhance student engagement and understanding.

#### **Access and Inclusion**

Investigate how digital transformation can bridge educational gaps and ensure equitable access to quality education for all students, regardless of their backgrounds or abilities.

#### **Technology Adoption**

Study the factors influencing students' adoption and effective use of digital technologies in their learning journey.

#### **Teacher Training and Support**

Research the training needs and support systems required for educators to effectively integrate digital tools into their teaching practices.

### **Benefits of the Digital Education System**

#### **Individualized Learning Experience**

A major drawback of the traditional education system is that many students experience a lack of interest when they are not able to catch up with the rest of the class. The contemporary digital format allows teachers to customize the study material based on an individual's learning speed and ability. The impact of educational programs is uplifting with the digitalization of the education system.

#### **Students become Smarter**

When exposed to new learning tools and technology students develop effective self-directed learning skills. The digital education system enables students to analyze what they need

to know to be able to search and utilize online resources. It plays a significant role in magnifying their efficiency, learning ability, and productivity.

### **Smart Classrooms**

The chalk and talk method is now a thing of the past, and teachers are making use of more tech-savvy methods to help students understand that learning can be innovative and fun. The modern-day classrooms are equipped with a TV or a projector which makes it is easy to shift from a regular classroom session to an interactive digital session. This can make students pay more attention as they are extensively acquainted with the digital world.

### **High Engagement Learning**

The traditional education system provides limited scope for engagement as its forces at work include limited factors like textbooks, an instructor, and hand-written notes, whereas the digitized education system offers a wide range of choices to learn from. The unlimited availability of resources makes every session extremely innovative and engaging. The interactive and game-based learning sessions gain higher engagement from students.

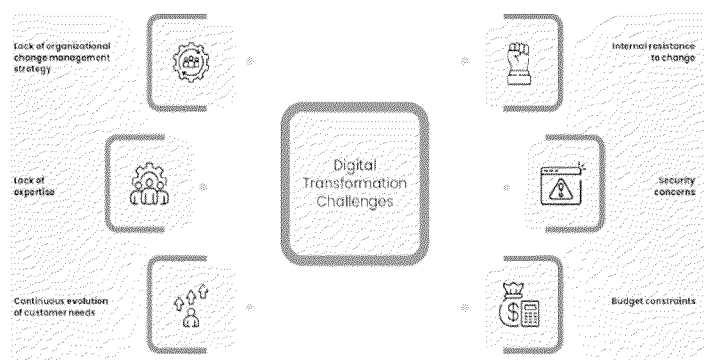
### **Accountability in Students**

The digital education system incorporates real-time evaluation and system-generated performance reports which increases the transparency of assessment. It enables students to analyze their performance and come up with required solutions on their own. The digital education system brings students out of their shells and makes them independent thinkers who know what to study, when to study and how to study. They no longer remain dependent on their teachers and parents to spoon-feed them with information.

### **Digital Transformation Challenges**

Whenever an organization goes through fundamental changes, it is expected to also experience various challenges and difficulties. This also applies to digital transformation, and if the transition does not happen smoothly organizations can face some challenges.

The most common digital transformation challenges are:



### **1. Lack of organizational change management strategy**

Organizational change management refers to an organized approach to managing changes in an organization, in this case, to managing digital transformation. It can be difficult, however, it is crucial. The lack of proper organizational change management can negatively impact an organization's digital transformation which is why it is one of the primary reasons for the high failure rate.

Having a strong and effective change management strategy is vital for success as it increases the likelihood for an organization to achieve its transformation objectives.

### **2. Lack of expertise**

When an organization aims digital transformation, the lack of expertise could threaten its journey. Considering how complex digital transformation strategies are, the right skill and knowledge set are required to implement the necessary changes.

According to KPMG, organizations have reported talent gap issues that threaten to slow down digital transformation. 44% of the survey respondents said that a shortage of experts hindered the progress, 32% said that adding new talent and new systems is costly, and 29% said that a lack of skills to implement these systems led to delayed progress. Organizations lack employees with adequate skills in digital transformation procedures, cybersecurity, application architecture, and other related IT and non-IT fields.

Some of the most valuable and in-most-demand skills are in these areas:

- Cloud Computing
- Artificial Intelligence and Machine Learning
- Mobile app development
- User Experience (UX) design
- Block chain
- Cyber security
- DevOps

A way to close this digital skill gap is to educate and train employees so that they can successfully adapt to the digital transition.

### **3. Continuous evolution of customer needs**

Customers' expectations and demands have advanced as a result of evolving developments and improvements in customer service, and this poses a challenge for many organizations. Even when organizations put years of effort into digital transformation, customers' needs can change throughout that time as they are constantly looking for more

intuitive and enhanced services. This means that extra effort is needed to implement the new digital technologies that would meet the continuous evolutions of customer needs.

#### **4. Internal resistance to change**

Despite their fascinating ability to adapt to changes, humans by their nature tend to enjoy comfort and routine as it gives them a sense of security. Changes, especially the big ones, can make people feel uncomfortable and cause stress for some, impacting their well-being. That is why, when organizations are going through digital transformation, they can experience employee pushback.

#### **5. Security concerns**

As organizations adopt remote work, digital processes, and cloud-based technology, they are exposed to higher levels of risk. Consequently, they are required to implement higher security measures and improve their cyber security to defend themselves against threats. Not protecting data and other valuable assets of an organization can lead to enormous risks and negative consequences.

#### **6. Budget constraints**

Another challenge of digital transformation is the high costs that come with it. As this is a huge investment, organizations need to carefully plan the budget and come up with a strategy that will address and respond to customers' and organizations' needs.

### **How to Overcome Challenges and Succeed with Digital Transformation?**

According to a digital transformation experts there are three critical factors for every successful digital transformation are:

- Strategy
- Mindset
- Skill and tech

A perfect balance between this Golden Triangle of Digital Transformation and a change in each element is undoubtedly a big step toward a successful digital transformation journey. Organizations need to have a clear strategy and integrate it into all organizations' processes.

#### **1. Organizational change management**

To implement a successful organizational change management, organizations should apply many strategies and actions.

Some of the key elements for managing organizational change are:

**Plan** - Organizations should carefully analyze their processes, establish priorities, and develop new strategies accordingly. Define the digital transformation goals and align them with

the organization's vision and objectives. Organizations should carefully document an established plan which covers all the details of changes like what processes, resources, and phases will it contain, when will it start, who will be responsible, etc.

**Start from the top management levels** - The upper-management levels are the ones who make the most important decisions, hence they should be the ones deciding about the investments, technologies, processes, roles, and responsibilities.

The organizations' leaders will also be the ones communicating the proposed changes to all employees, those directly and indirectly involved. They should explain why the changes are happening and talk through any presented concerns of employees if any. The top management should also encourage and accept regular feedback.

**Monitor and measure** - As the transformation is happening, organizations should evaluate the process continuously and measure the metrics to make sure they are achieving the goals. Additionally, regular monitoring can assist in identifying potential issues and quickly addressing them.

As for many other changes, organizations can get powerful insight from data and analytics for digital transformation as well. They can use these data to overview general and specific process enhancement.

## **2. Up skilling and recruitment**

Lack of expertise is a very common challenge of digital transformation. Organizations should understand that they need to have skilled employees who can carry on the process, and if needed, they should seriously consider investing in bringing in new employees which have the required expertise, skills, and knowledge.

Adding leaders who are very familiar with digital processes and are fully dedicated to transformation is another fundamental action toward success. Furthermore, employees need to be trained and recruited to use new tools and get prepared for the new technologies.

## **3. Meeting students' needs**

Digital transformation is impacting the student's experiences fundamentally. In order to meet their expectations and needs, which are evolving constantly, organizations should stay up to date with the newest trends and learn continuously about new ways, methods, and technologies developed to enhance their experience.

## **4. Work cultural change**

The importance of human factor has now been established. As reported by Forbes, the key to the digital success of organizations is starting the change process with humans, not



technology. Organizations need to work on a cultural mindset change and the whole organizational culture by raising awareness about the importance of digital transformation and other related elements. A good method to mitigate employee resistance to change is involving the whole team from the beginning and communicating with them frequently and transparently.

#### **5. Digital transformation security**

Digital transformation is a process that carries risks and their identification and management are crucial to a successful and secure change. Organizations should implement security controls and policies, invest in new tools and technologies, implement risk management, and train employees.

#### **6. Digital transformation budget planning**

Besides the investment in time, digital transformation requires a lot of investment in money which needs to be planned carefully. Organizations should create a financial roadmap to facilitate the processes. A budget should be prepared based on overall goals and needs, strategies, priorities, timelines, planned outcomes, return on investments, etc. The budget should be flexible in case any challenges or issues are rising.

### **Findings**

Keep in mind that the field of education technology is rapidly evolving, Here are some key findings up to that point:

#### **Improved Learning Outcomes**

Digital transformation initiatives, when effectively implemented, have been associated with improved student learning outcomes. Personalized learning, access to a wealth of online resources, and interactive digital tools have contributed to enhanced educational experiences.

#### **Increased Engagement**

Technology has the potential to increase student engagement by offering interactive and multimedia-rich learning experiences. Gamification, virtual reality, and online discussions have proven effective in keeping students engaged.

#### **Flexibility and Accessibility**

Digital transformation has allowed for greater flexibility in education. Students can access learning materials and participate in classes remotely, accommodating diverse learning styles and circumstances.

### **Data-Driven Insights**

The collection and analysis of data in digital education have provided valuable insights into student performance. Educators can identify areas where students may be struggling and provide timely interventions.

### **Professional Development**

Effective integration of technology in education often requires ongoing teacher training and professional development. Teachers need to be proficient in using digital tools and adapting their teaching methods.

### **Conclusion**

The government is working around the clock to make meaningful reforms to the country's education system so that learners can obtain world-class education. By equipping its students with the requisite skills and expertise, efforts are being made to make India an information superpower and to eradicate the shortage of staff in science, technology, academia and industry.

The government is especially focused on improving the education infrastructure in the country's rural and backward regions through a wide range of schemes, policies and programs. The growth of every country depends on the education of its people. The various policies and systems aimed at ensuring education for all reflect the government's commitment to inclusive growth.

### **Suggestions**

Increase availability of digital infrastructure at rural and remote location. Connect all the rural areas with high speed internet for better implement of digital India. Create awareness on the benefits of digital services. Colleges and universities should organizer service program for digital literacy and better understanding with digital India program. Digital literacy is first step to improve the mindset of the citizens regarding digitalization. People should know how to secure their private information and they should know the limitation of the uses. Increase in the adoption rate is dependent upon maximum connectivity with minimum cybercrime risk. For this we need a strong cyber security team and cybercrime law. Government provides us user friendly application and services for better adoption rate. For citizen services there is limited availability of applications. Government needs to provide apps for urban and rural areas which reduce the work load and deliver all information directly to citizen. Private sector should be encouraged for development of last mile infrastructure in rural and remote areas. To encourage private sector, there must be favourable taxation policies, quicker clearance of projects. In India there is more than 1600 languages and scripts and people of rural areas are can't understand the digital

languages so government needs to provide information in local languages. Government need to improve his policies and update technology time to time for impressive and attractive service delivery. Organizations can guide their employees and make them digital literate regarding the financial, educational, agricultural and other aspects.

### References

1. Rani Suman (2016) .Digital India: Unleashing Prosperity. Indian Journal of Applied Research, volume-6, Issue 4, pp187-189.
2. Seema Dua (2017) research on digital India challenges and opportunities international journal of science technology and management, vol16, issu3 2017
3. Digital India nine pillars <http://www.cmai.asia/digitalindia/>
4. NDTV & M.H.R.D report [https://mhrd.gov.in/sites/upload\\_files/mhrd/files/statistics-new/ESAG-2018.pdf](https://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf) [www.ndtv.com](http://www.ndtv.com)
5. The Hindu data breaching report <https://www.thehindubusinessline.com/news/1-bn-records-compromised-in-aadhaar-breach-since-january-gemalto/article25224758.ece>
6. Taxation OECD report <https://www.oecd-ilibrary.org/docserver/9789264293083-en.pdf?expires=1570979661&id=id&accname=guest&checksum=6DAC9676D50BC328C668FFB31D4FEBCF>
7. ASSOCHAM report <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-digital-india-unlock-opportunity-noexp.pdf>

## 15. Energy Efficient Buildings in India

**Ms. Shraddha Ghorpade**

Asst. Prof., Department of Environmental Studies,  
Ramanand Arya D.A.V. College (Autonomous) Bhandup, Mumbai.

---

### **Abstract**

Developing countries face the challenge of balancing economic growth and environmental protection, with energy conservation being a major concern in building design. Building construction consumes a significant amount of energy, but a building's lifetime energy usage surpasses its construction energy. Factors affecting energy consumption, including building materials and overall usage, must be considered to reduce energy use. demand, necessitating a shift toward energy-efficient buildings. This paper explores strategies for reducing energy consumption in both the construction and long-term operation of buildings, addressing principles of sustainable construction, green building rating systems, energy conservation techniques, and associated challenges. The research is underpinned by secondary data sources, including literature reviews, government and industry reports, case studies, and statistical datasets. India's building sector, responsible for over 30% of electricity consumption, highlights the urgency of energy efficiency. Residential buildings, in particular, are major energy consumers, driven by size and evolving lifestyles.

### **Introduction**

In recent years, India has witnessed a remarkable surge in urbanization and economic growth, leading to an unprecedented demand for energy. With this increased demand comes the pressing need for sustainable development practices, particularly in the construction and real estate sectors, which have a significant impact on the nation's energy consumption and environmental sustainability. As a response to these challenges, the concept of energy-efficient buildings has gained significant momentum, representing a vital step toward achieving a more sustainable and resilient future for India.

Energy-efficient buildings, often referred to as green buildings or sustainable structures, are designed and constructed to minimize their energy consumption and environmental footprint. These buildings employ advanced architectural, engineering, and technological solutions that

optimize energy use, reduce greenhouse gas emissions, and enhance the overall comfort and well-being of their occupants.

India's journey towards energy-efficient buildings is motivated by a combination of factors, including the urgent need to address climate change, reduce energy costs, and ensure a healthier and more productive environment for its citizens. Furthermore, the government has recognized the importance of promoting green construction practices and has introduced several initiatives and regulations to incentivize and mandate energy-efficient building practices.

### **Scope and Objective**

The primary goal of this study is to identify strategies for minimizing energy consumption in buildings, encompassing both their initial construction phase and their long-term operational lifespan. This research paper delves into various aspects such as the principles of sustainable construction, rating systems for environmentally-friendly buildings, practical methods for conserving energy, and the challenges associated with constructing energy-efficient structures.

### **Methodology**

This research paper relies on secondary data sources to provide a comprehensive analysis of energy-efficient buildings in India. Secondary data refers to information that has already been collected, compiled, and analyzed by other researchers, government agencies, organizations, and institutions. The secondary data sources for this research encompass various documents, reports, publications, and datasets related to energy-efficient buildings in India.

### **Data Collection**

1. Literature Review:
2. Government Reports:
3. Industry Reports:
4. Case Studies:
5. Statistical Datasets

### **Energy Efficiency in India**

India, boasting a population exceeding 1.3 billion, ranks as the world's second-most populous nation and the third-largest economy based on Purchasing Power Parity. The country has established an ambitious economic target of reaching a GDP of USD 5 trillion by 2024-25, with an annual growth rate of 9%. To sustain this economic growth, India will require a

substantial energy supply. India has also committed to reducing the emissions intensity of its Gross Domestic Product by 33-35% by 2030 compared to the 2005 level (1). Achieving this target necessitates significant enhancements in energy efficiency across all sectors, with a particular emphasis on the building sector. This is crucial since buildings in India account for over 30% of the total electricity consumption (2). In the Indian context, electricity consumption is distributed, with the domestic sector and commercial sector consuming 22% and 9% respectively, and a significant portion of this electricity usage is attributed to heating, ventilation, and air conditioning (HVAC) systems.

Buildings globally consume a significant 48% of total energy, produce 19% of energy-related greenhouse gas emissions, and contribute to black carbon emissions and waste generation. In India, the building sector uses 7% of the country's electricity, with commercial buildings accounting for 33% and residential buildings for 67% of energy consumption. This high energy usage in Indian homes results from their large size and changing lifestyles among the affluent population. If current trends continue, residential energy consumption is expected to increase substantially. This situation underlines the pressing need to reduce electricity demand and carbon emissions. Additionally, the use of diesel generators in areas with unreliable grid electricity supply in India contributes to environmental pollution. Addressing these issues is critical.

## **Policy and Regulatory Framework**

### **1. Energy Conservation Building Code (ECBC)**

The Energy Conservation Building Code, introduced in 2007, sets mandatory energy efficiency standards for new commercial buildings with a connected load of 100 kW or contract demand of 120 kVA and above. ECBC aims to optimize energy use in building design, construction, and operation. Compliance with ECBC standards is crucial for obtaining building permits in designated states and union territories.

### **2. National Mission on Enhanced Energy Efficiency (NMEEE)**

NMEEE, under the National Action Plan on Climate Change, includes initiatives like Perform, Achieve, and Trade (PAT) for energy-intensive industries and Standards & Labeling for appliances used in buildings.

### **3. Bureau of Energy Efficiency (BEE)**

The Bureau of Energy Efficiency is a statutory body tasked with promoting energy efficiency and conservation in various sectors, including buildings. BEE develops and enforces energy efficiency standards and labeling programs for building materials and appliances. It also offers guidance, training, and financial incentives to promote energy-efficient practices.

### **4. GRIHA (Green Rating for Integrated Habitat Assessment)**

GRIHA is a green building rating system developed in India. It evaluates buildings on various parameters such as energy efficiency, water conservation, and indoor air quality. GRIHA certification is increasingly sought after and recognized as an indicator of environmentally responsible construction.

### **5. Leadership in Energy and Environmental Design (LEED)**

Although LEED is not a government initiative, it has a significant influence in India. The Indian Green Building Council (IGBC) administers LEED certification in the country, offering a globally recognized standard for energy-efficient building practices.

### **6. State-Specific Initiatives**

Several states and union territories in India have introduced their own energy efficiency policies and building codes, often building upon national initiatives. For instance, states like Andhra Pradesh and Telangana have launched state-specific building codes to enhance energy efficiency.

### **7. Renewable Energy Integration**

India has policies to promote the integration of renewable energy sources, such as solar and wind power, into building design and operation. This includes incentives, subsidies, and net metering regulations that encourage the use of renewable energy in buildings.

### **8. Tax Incentives and Financing**

The government has provided tax incentives, subsidies, and financing options to encourage the adoption of energy-efficient technologies and practices in building construction and retrofitting.

### **Challenge in Constructing Energy-Efficient Buildings**

The main challenge in constructing energy-efficient buildings lies in the insufficient enforcement of government policies. These policies, intended to promote energy efficiency, need to be rigorously implemented. However, there are three key obstacles that hinder this translation.

Firstly, the demand for residential buildings remains consistently high, but the demand for energy-efficient structures is not as robust. Secondly, concerns regarding construction costs and short-term gains often lead to criticism of energy-efficient building projects. Striking a balance between the preferences of builders, who aim to reduce construction expenses, and users, who prioritize environmentally efficient buildings, proves to be challenging. This situation has resulted in a shift towards emphasizing energy cost savings over energy conservation. Furthermore, the government has tended to favor broad, indirect regulatory measures, as opposed to robust direct regulations. For instance, instead of imposing stringent building codes or leveraging the substantial influence of public institutions as building owners to set an example for improvement, the government has relied on less effective tools like financial incentives.

### **Case Studies**

Project 1 - Dilwara Bagh, Countr a Bagh, Country House f y House for Reena and Ravi Nath, Gurgaon.

It involved designing a country house for a family of four, created by architects Gernot Minke and Sanjay Prakash. The house is located in a composite climate and was completed between 1992 and 1996. The property covers 206 m<sup>2</sup> on a 16,000 m<sup>2</sup> plot and is owned by Reena and Ravi Nath. The construction was managed by the architect-owner.

The design features of the house were tailored to meet seasonal requirements. In summer, measures were taken to reduce heat gain, including using air cavities in walls and roofs, earth berms, shading with overhangs and louvres, and natural shading provided by trees and creepers. Heat loss was minimized through cross-ventilation and cooling by water surfaces and plants, except during the monsoon. An earth tunnel system was employed for cooling.

In winter, heat gain was facilitated through direct sunlight and an underground earth tunnel, while heat loss was curbed with the use of air cavities and a compact building form.

Throughout all seasons, the design emphasized temperature balance using the thermal mass of walls and floors, regulated indoor air humidity with earth walls (adobe), increased natural daylight through reflecting stone louvres in windows, and maintained a balanced microclimate with water and vegetation.

Project 2 - Office building of t ice building of the West Bengal Renewable Energy Development Agency, Kolkata



This project involved the construction of a commercial office building in Kolkata, characterized by a warm and humid climate. Designed by Gherzi Eastern Ltd and with energy consulting by TERI (Tata Energy Research Institute), it was completed in 2000 for the West Bengal Renewable Energy Development Agency. The building covers a plot area of 10,895 m<sup>2</sup> with a built-up area of 2,026 m<sup>2</sup>. The total project cost was Rs 16.3 million, excluding expenses for the solar photovoltaic system and air-conditioning.

The design of the building incorporated several energy-efficient features. Space planning was optimized to minimize the need for air-conditioning, while the ground surfaces facing the southern and eastern sides were covered with grass. The use of vegetation and water bodies was encouraged to modify the microclimate, and office spaces were naturally lit through raised roofing with low e-glass and light shelves. Proper shading devices were implemented to block direct heat gains while allowing ample daylight. The building also featured ventilation systems to remove internal heat, energy-efficient lighting with daylight integration, and a 25-kWP grid-interactive solar photovoltaic system to meet a significant portion of its energy requirements.

### **Conclusion**

In conclusion, the transition to energy-efficient buildings in India is a pivotal response to the nation's burgeoning energy demands, environmental responsibilities, and climate change mitigation goals. Government-driven initiatives, energy codes like ECBC, and the proliferation of green building rating systems such as GRIHA and LEED have laid the foundation for a more sustainable construction landscape. However, challenges persist, primarily stemming from the enforcement of these regulations and the delicate balance between cost considerations and environmental priorities. Striking this balance remains a crucial challenge in the construction sector.

The case studies of Dilwara Bagh and the West Bengal Renewable Energy Development Agency office building exemplify the tremendous potential for innovative design and technology to optimize energy consumption, reduce environmental impact, and provide occupants with comfortable and sustainable living and working environments.

In essence, India's journey toward energy-efficient buildings is not only a response to a growing energy crisis but a fundamental step toward ensuring a resilient and sustainable future for all its citizens. As the nation continues to evolve, embracing energy-efficient construction

practices is an indispensable component of its larger commitment to environmental stewardship and responsible development.

### **Citations**

1. India's Intended Nationally Determined Contribution. <http://www4.unfccc.int/submissions/INDC> ( 15 May 2019 , date last accessed).
2. Energy Statistics 2020. [http://mospi.nic.in/sites/default/files/publication\\_reports/Energy%20Statistics%202019-final.pdf](http://mospi.nic.in/sites/default/files/publication_reports/Energy%20Statistics%202019-final.pdf) (5 July 2021, date last accessed).
3. National Statistical Organisation Ministry Of Statistics And Programme Implementation Government Of India [www.mospi.gov.in](http://www.mospi.gov.in), cited on 12-05-15, 05:35 P.M
4. Garg, N., Kumar, A., & Pipralia, S. (2018). Initiatives to achieve energy efficiency for residential buildings in India: A review. *Indoor and Built Environment*, 28(6). [https://www.researchgate.net/publication/327650356\\_Initiatives\\_to\\_achieve\\_energy\\_efficiency\\_for\\_residential\\_buildings\\_in\\_India\\_A\\_review](https://www.researchgate.net/publication/327650356_Initiatives_to_achieve_energy_efficiency_for_residential_buildings_in_India_A_review)
5. Khosla, S., & Singh, S. K. (Year). "Title of Your Research Paper." *International Journal of Civil Engineering Research*. ISSN 2278-3652 Volume 5, Number 4 (2014), pp. 361-366 [https://www.ripublication.com/ijcer\\_spl/ijcerv5n4spl\\_09.pdf](https://www.ripublication.com/ijcer_spl/ijcerv5n4spl_09.pdf)
6. Kumar, A., & Sharma, K. (2020). " A Review Paper on Energy Efficient Building." *International Research Journal of Engineering and Technology*, 07(06), e-ISSN: 2395-0056, p-ISSN: 2395-0072. <https://www.irjet.net/archives/V7/i6/IRJET-V7I6802.pdf>
7. Dalal, R., Bansal, K., & Thapar, S. (2021). "Bridging the energy gap of India's residential buildings by using rooftop solar PV systems for higher energy stars." *Clean Energy*, 5(3), 423–432. <https://academic.oup.com/ce/article/5/3/423/6324054#272524500>
8. Tarkar P. (2022), ' Energy Efficient Buildings in India: Key Area and Challenges' IOP Conf. Ser.: Earth Environ. Sci. 1084 012076 <https://iopscience.iop.org/article/10.1088/1755-1315/1084/1/012076/pdf>
9. Representative designs of energy-efficient buildings in India - Tata Energy Research Institute.

## 16. A Study on the most Effective Media to Advertise for Youth

**Dr. Shobha B. Mathew**

Assistant Professor, K. J. Somaiya College of Arts and Commerce, Mumbai.

---

### **Abstract**

Promotion plays a significant role in increasing sales. Advertising is one component of the promotion mix. There are many media through which one can advertise. Some of the medias are television, radio, newspaper, magazines etc. However, it is very challenging to understand which media your target audience is using. Nowadays there is strong presence of social media which is used by many companies to market their product. This paper attempts to understand the most effective media to advertise for youth. Today the companies have many options and the consumers are highly scattered. Hence, it is important to understand which media is most preferred by the youth.

### **Introduction**

Advertising is a form of communication. Like all forms of communication, it has many different effects and these effects are often related to one another. The message in an advertisement, no matter how strong and persuasive, will have no effect if the consumer does not see the advertisement or pay attention to it.

Positive advertising is also more common than negative advertising. Positive advertising techniques allow customers to trust the company in question more easily. Negative advertising, on the other hand, is the advertisements which work by warning the consumers about the negative consequences of some habit or behavior.

For all the positive potential in advertising, the reality is that it frequently influences society in negative ways. One negative aspect of advertising is its potential to feed into unrealistic expectations, breed discontentment and influence our thought processes in ways that are beyond our control.

### **Review of Literature**

Entertainment has been one of the primary criteria for creating an advertisement. Entertainment is used as a tool to gain attention of customers. An interesting and entertaining ad

is more likely to be remembered by consumers rather than a boring one. Therefore, it can be said that entertainment increases the effectiveness of advertising. That is why many companies are investing a lot of money to make advertisements that are humorous (Mandan, Hossein & Furuzandeh, 2013).

Alba & Hutchison (1987) defined familiarity as the number of product-related or service-related experiences that have been gathered by the consumer. These related experiences include direct and indirect experiences such as exposure to advertisements, interactions with salespersons, word of mouth contact, trial and consumption. Johnson and Russo (1984) viewed familiarity as being tantamount with knowledge. Johnson & Kellaris (1988) have considered experience contributing to familiarity. Review of the literature shows that knowledge; experience and familiarity are closely intertwined. Following Alba and Hutchison's (1987) definition, brand familiarity is identified as the accumulated correlated experiences that customers have had with a brand (Ballester, Navarro & Sicilia, 2012).

Advertisements generally have influence on how we perceive things around us. Through various types of advertisements, especially TVCs portray how a user of a certain product is or should be. It sometimes shows the social class the user of a product belong to, their lifestyle and attitudes.

In cases of beauty product this concept is highly applicable. In a research conducted in 2009 it was observed that one of most influential ideas spread by the media is society's perception of beauty and attractiveness. The thin beautiful woman and the handsome muscular men are seen everywhere. And as the influence of media increases, the pressure to hold on to these ideals increases (Russello, 2009).

In 2008, the YWCA USA published a report, *Beauty at Any Cost*, which highlighted the consequences of the beauty obsession on women and girls in America through media. This feeling of insecurity and obsession is very much likely to trigger purchase of beauty products (Britton, 2012).

The mass media is the most powerful way to spread these images that represent sociocultural ideals (Tiggemann, 2003). Advertising promote social messages and life style by illustrating the position of ideal consumer and stimulates consumer's willingness to purchase (Pollay & Mittal, 1993).

Advertising spending can have an effect in the buying behaviour of people in a sense that the more money spent can be linked with the quality of advertisement and the frequency of

advertisement. It may result in creating a lasting impression in consumer's mind. Advertising is an important extrinsic cue signalling product quality (Milgrom & Roberts, 1986). Heavy advertising spending shows that the firm is investing in the brand, which means the organization has a huge investment and thus implies that they might have a better quality of product (Kirmani & Wright, 1989). In addition, advertising spending levels are good indicators of not only high quality but also good buys (Archibald, Haulman & Moody, 1983).

Yoo, Donthu & Lee (2000) examined the impact of the marketing mix variables on consumer behaviour. The approach focuses on the indirect effect of these determinants on brand loyalty. Since advertising spending affects expectations of product or service quality in consumer's mind (Kirmani & Wright, 1989; Yoo, Donthu & Lee, 2000; Moorthy & Zhao, 2000), its role should be indirectly linked to brand loyalty implying that rather than the advertisement itself, it is how advertising affects customer perception of the firm that is more critical in impacting consumer buying behaviour (Ha, Janda & Muthaly, 2011).

Consumer buying behaviour refers to the methods involved when individuals or groups choose, buy, utilize or dispose of products, services, concepts or experiences to suit their needs and desires (Solomon, 1995). A behaviour that consumers display in searching for, paying for, using, evaluating and disposing of products and services that they think will satisfy their needs (Schiffman & Kanuk, 2007). It is a convergence of three fields of social science, they are, individual psychology, societal psychology and cultural anthropology (Ramachander, 1988). A theory that answers what, why, how, when and where an individual makes purchase (Green, 1992); it is particularly important to study the subject of consumer buying behaviour as it facilitate firms to plan and execute superior business strategies (Khaniwale, 2015).

Advertising is defined as any form of paid communication or promotion for product, service and idea. Advertisement is not only used by companies but in many cases by museum, government and charitable organizations. However, the treatment meted out to advertisement defers from an organization to an organization.

Advertising development involves a decision across five Ms Mission, Money, Message, Media and Measurement.

Mission looks at setting objectives for advertising. The objectives could be to inform, persuade, remind or reinforce. Objective has to follow the marketing strategy set by the company.

Money or budget decision for advertising should look at stage of product life cycle, market share and consumer base, competition, advertising frequency and product substitutability.

Message's development further is divided into four steps, message generation, message evaluation and selection, message execution, and social responsibility review.

Once the message is decided the next step is finalizing the media for delivering the message. The choice of depends on reach of media, frequency of transmission and potential impact on customer. Based on this choice of media types are made from newspaper, television, direct mail, radio, magazine and the internet. After which timing of broadcast of the message is essential as to grab attention of the target audience.

Checking on the effectiveness of communication is essential to company's strategy. There are two types of research communication effect research and sales effect research.

### **Objectives of the study**

- To understand the profile of the consumers
- To find out the most effective media for advertising to youth

### **Research methodology**

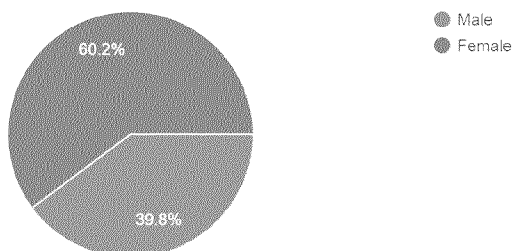
To achieve the objectives set out above, the researcher has undertaken this study within the city of Mumbai. Primary data is created and collected afresh and for the first time and thus happens to be original in nature. The primary data will be collected from the identified area with the use of a well designed questionnaire.

### **Sample Design**

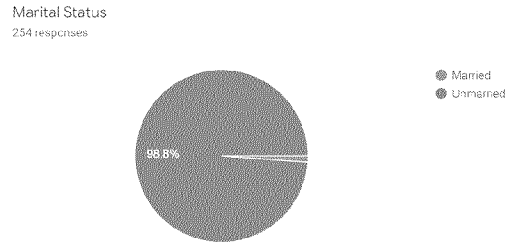
The sample design refers to selection of samples from the entire population. In this research appropriate sampling method will be used in drawing the sample. The sample size will be around 254 respondents.

### **Data Analysis**

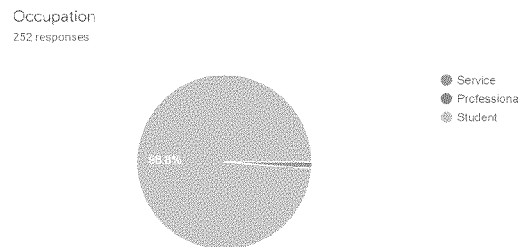
Gender  
254 responses



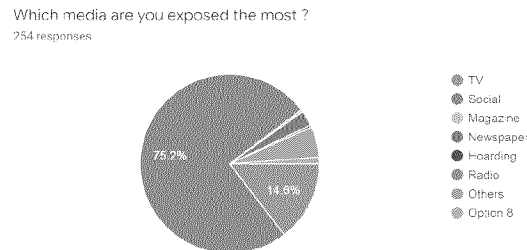
The above figure shows that 60.2% were female and 38.8% of the respondents were males.



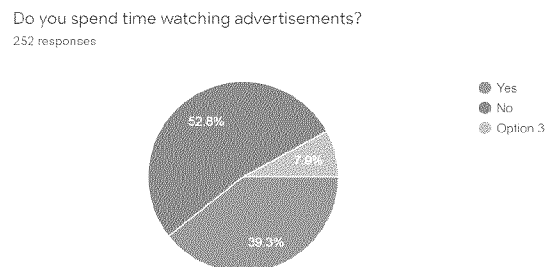
The above figure shows that 98.8% of the youth in the survey were unmarried.



The above figure shows that maximum number of respondents were students 98.8% of the respondents were students.



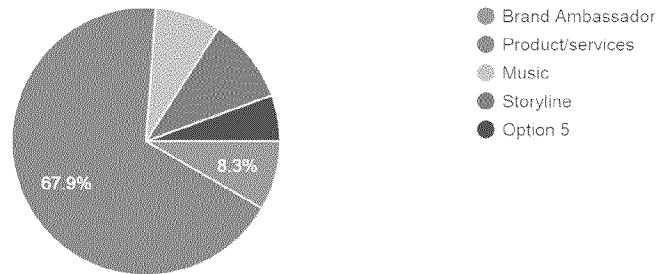
75.2% of the respondents were exposed to social media. 14.6% of the respondents were exposed to television. This indicates that today's youth is more exposed to the social media. It also can be observed that advertising to youth on social media would give maximum viewership and also results. Thus social media is the most effective media to advertise to youth.



52.8% of the respondents did not spent time watching advertisements., 39.3% of the respondents spent time watching the advertisement. This indicates that maximum youth do not spent time watching advertisement. However, 39.3% spent time watching advertisement.

What appeals you in an advertisement?

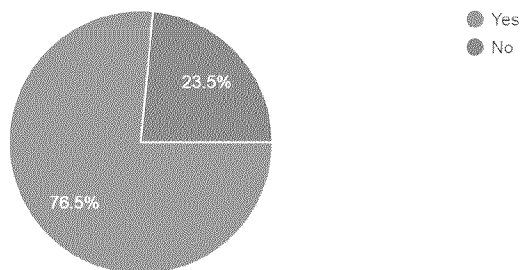
252 responses



67.9% of the respondents said that the product /service appeals to them in an advertisement. This means that products/services impacts maximum youth in an advertisement.

Does advertisement has an impact on your buying behaviour ?

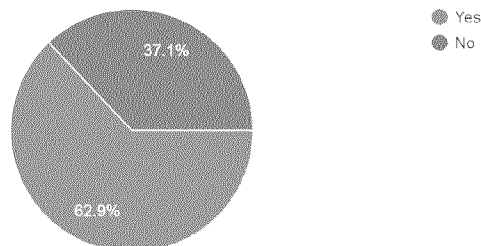
251 responses



76.5% respondents feels advertisements has an impact on their buying behaviour. Advertisement influences the buying behaviour of youth.

Does advertisement modify your attitude?

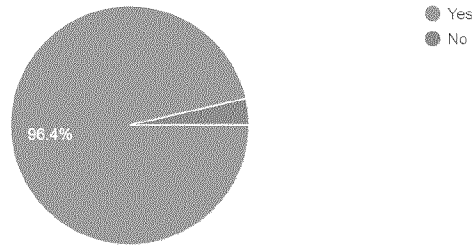
251 responses





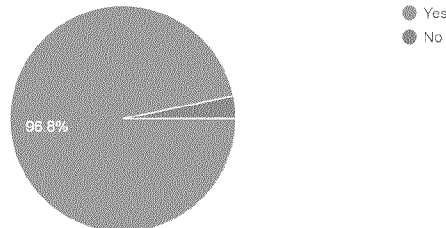
62.9% of the respondents believes that advertisement modifies their attitude. However, 37.1% of the respondents feels advertisements do not modify their attitude.

Do you think advertisement helps in brand recognition?  
251 responses



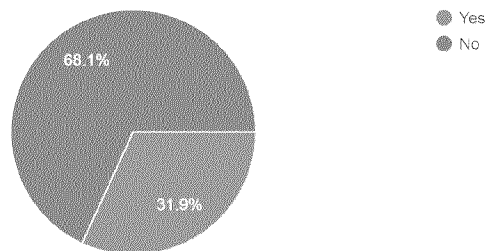
96.4% of the youth feels advertisement helps in brand recognition. Hence, advertisements have a significant role to play in brand recognition for youth. Brand recognition improves brand image and sales.

Does advertisement increase sales?  
249 responses



96.8% of the respondents feels advertisement increases sales.

Have you ever brought a product which you did not want only because you liked the advertisement?  
248 responses



68.1% of the respondents have not purchased a product after seeing an advertisement which they do not want. However, 34.9% of the respondents have purchased a product after seeing an advertisement.

### **Findings**

The following are the findings of the research are as follows :

- It has been observed that 60.2% were female and 38.8% of the respondents were males.
- 98.8% of the youth in the survey were unmarried.
- Maximum number of respondents were students 98.8% of the respondents were students..
- 75.2% of the respondents were exposed to social media. 14.6% of the respondents were exposed to television. This indicates that today's youth is more exposed to the social media. It also can be observed that advertising to youth on social media would give maximum viewership and also results. Thus, one can conclude that social media is the most effective media to advertise to youth.
- 52.8% of the respondents did not spent time watching advertisements., 39.3% of the respondents spent time watching the advertisement. This indicates that maximum youth do not spent time watching advertisement. However, 39.3% spent time watching advertisement.
- 67.9% of the respondents said that the product /service appeals to them in an advertisement. This means that products/services impacts maximum youth in an advertisement.
- 76.5% respondents feels advertisements has an impact on their buying behaviour. Advertisement influences the buying behaviour of youth.
- 62.9% of the respondents believes that advertisement modifies their attitude. However, 37.1% of the respondents feels advertisements do not modify their attitude.
- Advertisements have a significant role to play in brand recognition for youth. Brand recognition improves brand image and sales.
- 96.8% of the respondents feels advertisement increases sales.

### **Conclusion**

To get maximum effectiveness of sales where youth is the target audience, social media should be used. Today's youth is exposed to social media hence impact of advertisement would

be more in social media. The above research shows that social media is the most effective media to advertise for youth. Hence the companies who wants to get maximum impact on their sales where youth is their target audience, they should advertise on Facebook, what s up, Instagram etc. Advertisements have an impact on the youth so it is also an effective promotion tools which the companies should consider. Advertisements should be made in such a way that it has a positive impact on the attitude of the youth towards its products. Frequent advertisements in social media will help the consumer to identify the brands. As advertisement increases sales social media advertising should be used widely to advertise to youth.

### **References**

- Aaker, D.A. & Jacobson, R. (1994). The financial information content of perceived quality. *Journal of Marketing Research*, 31(2), 191-201.
- Ahmed, S. & Ashfaq, A. (2013). Imapct of advertising on consumer buying behavoiur through persuasiveness, band image and celebrity endorsement. *Global Media Journal*, 6(2).
- Alba, J.W. & Hutchinson, J.W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13, 411-454.
- Archibald, R., Haulman, C. & Moody, C. (1983). Quality, price, advertising and published quality ratings. *Journal of Consumer Research*, 9, 347-356.
- Madden, T.J. & Weinberger, M.G. (1982). The effects of humor on attention in magazine advertising. *Journal of Advertising*, 11(3).
- Maheshwari, P., Seth, N. & Gupta, A.K. (2016). An emphirical approach to consumer buying behaviour in Indian automobile sector. *Industrial and Commercial Training*, 48(3), 156-162.
- and Political Weekly, 23(9), 22-25.
- Ryans, C. (1996). Consumer Resources. *Journal of Small Business Management*, 34, 63-65.
- Schiffman, L. & Kanuk, L. (2007). *Consumer behaviour: A European outlook*. Pearson Education, London.

## 17. Consumer Buying Behavior towards Green Electronic Products - Indian Perspective

**Mrs. Kirti Dilip Sarode**

Assistant Professor, Ramanand Arya DAV College, Bhandup, Mumbai.

---

### **Abstract**

**Purpose-** The aim of this study was to study the Consumer buying behavior towards green electronic products as per Indian perspective.

**Design /Methodology / Approach –** Primary data collected through online questionnaire-based survey from 160 respondent reside in Mumbai and suburbs area used for analysis.

**Findings-** The findings showed that Consumer buying behavior towards green electronic products significantly impacted by environment awareness and concerns, quality and price, perceived consumer effectiveness (PCE) and promotional activity.

**Originality of the research –** The developed survey and findings can help the green electronics companies to understand the consumers buying behavior, which will help them in development of products and advertisement campaigns.

**Keywords-** Green electronic products, Consumer buying process, Perceived consumer effectiveness (PCE), environment awareness and concern.

Our planet is definitely a priceless gift from god to human kind, environment provides everything we need, including natural resources, food, cloth, home etc, But now a days continuous changes in natural resources and the over consumption has led to some realization about human responsibility towards nature. We have witnessed the natural hazards like landslides, storms, acid rains because of loss of environment. There is dire need for taking some strong footsteps towards the use of green products to prevent the loss of mother nature.

In the todays digital era the consumption of electronics products are increased exponentially because of need of constant connectivity, entertainment, lifestyle and ease of living. The consumption driven society and rapid expansion of technology result in creation of huge amount of E-waste. E-waste are one the main reason which responsible for the impact on nature, here the green electronics come into the picture. Electronics produced through environmentally-friendly processes are called as green electronics. They take into account the

consumption of energy and production of carbon. Green electronics are made out of recycled materials, green electronics reduce the consumption of vital natural resources.

It is not only companies responsibility to develop the green electronics products, consumers are also equally responsible they should use the green electronic products wherever possible. Understanding the consumers requirement and develop the ecofriendly products accordingly which please the consumers and also save the environment is the big challenge in front of companies. This study is about to explore the factors which influence consumers green electronic buying process. Promoting the green products like green electronics will cease the natural resources depletion ease the strain on environment.

## **2. Literature Review**

Green Purchase behaviour refer to the purchasing and consuming products that have minimal impacts on environment (Mainieri, et al, 1997) and green consumers are those who have awareness and concern for the environmental issues which are essential (Soonthorsmai, 2007). Schwepker and Cornwell(1991) in their paper “An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products” attempts to determine variables which can be used to discriminate among the groups that are and are not willing to buy products which are ecologically packaged. Attitude toward litter, attitude toward ecologically conscious living, locus of control and the perception of pollution as a problem were found to be significant discriminating variables.

Chan, R.Y.K., (2001) in his research paper “Determinants of Chinese consumers’ green purchase behavior.” Examined the influence of various cultural and psychological factors on the green purchase behavior in Chinese consumers. For this study data collected from two major Chinese cities and analysed using structural equation modelling method. This study confirmed that there is influence of the consumer’s man–nature orientation, ecological affect, degree of collectivism, ecological knowledge, on their attitudes toward green purchases.

Kim, Y. and Choi, S.M. (2005) in their research paper “Antecedents of green purchase behavior: An examination of collectivism, environmental concern and PCE” identifies key antecedents of green purchase behavior and develops a model for explaining their influence on ecological consumption. Researchers suggest that the collectivism influences the Perceived Consumer Effectiveness (PCE) and environmental concern directly influences green purchase behavior.

Sharma and Kapse,(2013), identify the factors which influence the consumer purchase behavior for green products in there study “Consumer purchase behaviour for green products”. Data collected from 5 major cities in Madhya Pradesh, India over 650 questionnaires analyzed by structural equation modeling. This study identified the 7 major factors which influence the consumer purchase behavior for green products viz., environmental awareness & concern, price and quality, Perceived Consumer Effectiveness (PCE), attitude, information and promotional activity.

Ansu-Mensah, (2021), assess the effect of university students’ awareness of green products on their green purchasing intentions in paper titled “Green product awareness effect on green purchase intentions of university students’: an emerging market’s perspective”. Data collected from 478 university students used for this study. This paper concluded that green perceived quality has a significant impact on green purchase intentions, on other hand green perceived availability has a slightest impact on green purchase intentions.

### 3. Objective and Research Model

#### 3.1 Objective

- To study the consumer buying behaviour toward green electronics goods.
- To assess the factors affecting the Consumer buying behavior toward green electronics products.

#### 3.2 Research Model

Research Model given in the Figure 1 used for this study

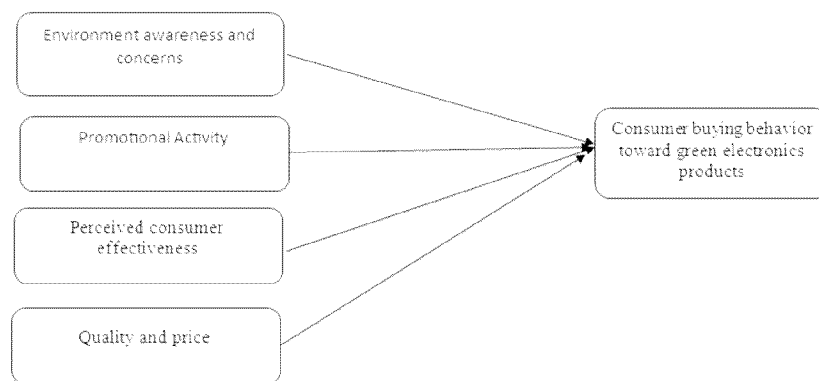


Figure No. 1 Proposed research model

### **3.3 Research Hypothesis**

- H1- Environment awareness and concern has a significant and +ve effect on Consumer buying behaviour toward green electronics products
- H2- Promotional activities by green electronic goods companies has a significant and +ve effect on Consumer buying behaviour toward green electronics products
- H3- Perceived consumer effectiveness has a significant and +ve effect on Consumer buying behaviour toward green electronics products
- H4- Quality and price of green electronics goods has a significant and +ve effect on Consumer buying behaviour toward green electronics products.

## **4. Research Methodology**

This study was originally designed to study the consumer buying behaviour toward green electronics goods.

Primary data was collected through an online well-structured questionnaire designed as a Google Form. The sample comprised people who are more than 16 years old residing in Mumbai.

### **4.1 Questionnaire Development**

For data collection, a 5-point Likert scale was used, with responses ranging from 1 (strongly disagree) to 5 (strongly agree).

### **4.2 Sampling Size and Sampling Method**

Data collected from a people across Mumbai city, with the sample size 160. Non-probability method of convenience sampling used for data collection.

### **4.3 Data Analysis tool**

For analysis of data, Structural equation modelling technique is used. Quality of the construct in this study was assessed by measurement model. The assessment of quality criteria starts with evaluation of the factors loading which is followed by establishing construct reliability and construct validity followed by hypothesis testing.

## **5. Data Analysis and Results**

Collected primary data analysed using the structural equation modelling.

### **5.1 Outer Model/measurement Model**

The outer model specifies the relationship between construct and items.

### 5.1.1 Factor Analysis

	CB	EAC	PA	PCE	QP
CB1	0.879				
CB2	0.847				
CB3	0.831				
EAC1		0.895			
EAC2		0.862			
EAC3		0.887			
PA1			0.933		
PA2			0.965		
PA3			0.936		
PCE1				0.915	
PCE2				0.921	
PCE3				0.896	
QP1					0.910
QP2					0.873
QP3					0.913

**Table 1 Factor analysis**

Note- EAC= Environment awareness, PA= Quality and price, PCE= Perceived consumer effectiveness, PA= Promotional activities, CB= Consumer buying behaviour.

Factor analysis has been used to find the factors affecting the consumer buying behaviour. Refer to Table no. 1, none of the items in the study had factor loading less than the recommended value of 0.50 . Hence, no items were further removed.

### 5.1.2 Reliability Analysis and Convergent Validity

	Cronbach Alpha	Composite Reliability	R-square	Average variance extracted (AVE)
CB	0.812	0.814	0.767	0.727
EAC	0.857	0.869		0.777
PA	0.939	0.941		0.892
PCE	0.897	0.901		0.830
QP	0.881	0.885		0.808

**Table 2. Reliability Analysis and Convergent Validity**

Refer to Table No .2 Composite reliability and Cronbach alpha values are greater than 0.70 and AVE value are greater than 0.5 hence the existing construct is acceptable (Fornell and Larcker,1981; Gefen et al., 2000).



**5.1.3 Discriminant Validity**

	CB	EAC	PA	PCE	QP
CB	<b>0.853</b>				
EAC	0.845	<b>0.881</b>			
PA	0.740	0.684	<b>0.945</b>		
PCE	0.686	0.664	0.833	<b>0.911</b>	
QP	0.742	0.731	0.807	0.730	<b>0.899</b>

**Table No. 3 Discriminant Validity**

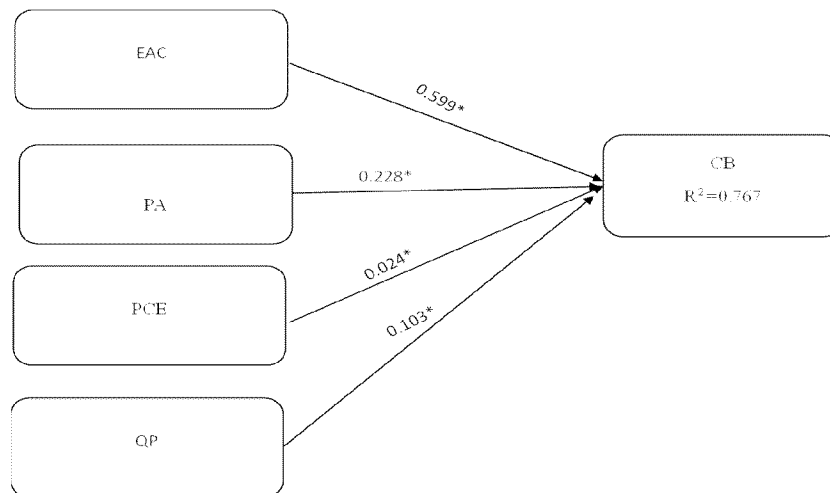
As per Fornell and Larcker (1981) the square root of AVE for each construct compares with the inter-construct correlation estimate. The square roots of AVE (in bold) for constructs and construct correlation estimates mentioned in the Table No3. Each square root of AVE is greater than corresponding row and column which indicate the adequate discriminant validity.

**5.2 Inner Model or Structural Model Assessment or Hypothesis Testing**

The t value is used to crosscheck the significance of hypothesis. The results are exhibited in Table No.4 and figure no. 2.

Hypothesis	Path	B	SD	T	P	Result
H1	EAC -> CB	0.599	0.113	5.284	0	Supported
H2	PA -> CB	0.228	0.160	6.427	0.027	Supported
H3	PCE -> CB	0.024	0.133	4.178	0.000	Supported
H4	QP -> CB	0.103	0.171	3.601	0.004	Supported

**Table No.4 Hypothesis testing**



**Figure No. 2 Path coefficient (Note\*P value<0.05)**

Note. B = Beta (Path) coefficient, SD= Standard deviation , T= t-statistics, P=Probability P value, EAC= Environment awareness, QP= Quality and price, PCE= Perceived consumer effectiveness, PA= Promotional activities, CB= Consumer buying behaviour.

Refer to Tabler no. 4 all hypothesis P value  $<0.05$  hence all hypothesis accepted/supported.

## **6. Discussions and Conclusion**

The results shows that the consumer buying behaviour toward green electronics products significantly affected by environment awareness and concern. Consumer's concern toward the environment motivated them to buy the green electronics products. Quality of products as well as good affordable price also play the major role in consumer buying process, consumer preferred to buy the green electronics products if they have a good quality along with affordable price.

This research has confirmed that Perceived Consumer Effectiveness (PCE) and promotional activities affect significantly the consumer green electronic buying process. Consumers thinks by buying the green electronics products they are protecting the environment. The thought of saving the environment by using green electronic products make them feel good, they were not only willing to buy the green electronic products in future but also willing to recommend the green electronics products to their friends and family.

From the analysis, it can be inferred that promotional activities like advertisements have a positive effect on consumer green electronic buying process. In the today's modern era advertainments serves as a great source of information. Consumers was aware and introduced to green electronics products by the various promotional activities run by electronic goods manufacturing companies. This advertisement equipe the consumer with products information and its important role in saving the environment, which influence the consumers buying decisions for green electronics.

It is critical to understand the factors which contribute the consumer's decision making of buying the green electronics goods. In current time saving the environment by all mean is the dire need for mankind's future. Use of green electronics can contribute this cause significantly. Understanding factors affect the consumer's buying process can help to promote the green products at maximum extent among the users.

**Bibliography**

1. Ansu-Mensah, P. (2021). Green product awareness effect on green purchase intentions of University Students': An emerging market's perspective. *Future Business Journal*, 7(1). doi:10.1186/s43093-021-00094-5
2. Chan, R.Y.K., (2001), "Determinants of Chinese consumers' green purchase behavior. *Psychology and Marketing*, 18(4): 389-413.
3. Fornell, C., and Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388.
4. Gefen, D., Straub, D. W., and Boudreau, M. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(7), 2-76.
5. Kim, Y. and Choi, S.M. (2005), "Antecedents of green purchase behavior: An examination of collectivism, environmental concern and PCE", *Advances in Consumer Research*, 32: 592-599.
6. Mainieri, T., Barnett, E., Valdero, T., Unipan, J., and Oskamp, S. (1997), "Green buying: The influence of environmental concern on consumer behavior", *Journal of Social Psychology*, 137, pp. 189-204.
7. Schwepker, C.H. and Cornwell, T.B. (1991), "An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products", *Journal of Public Policy and Marketing*, 10, pp. 77-101.
8. Sharma, V. & Sonwalkar, J. & Kapse, M., (2013). "Consumer Purchase Behaviour for Green Products," *International Journal of Economics & Business Administration (IJEBA)*, *International Journal of Economics & Business Administration (IJEBA)*, vol. 0(4), pages 50-65.
9. Soonthonsmai, V. (2007), "Environmental and green marketing as global competitive edge: Concept, synthesis, and implication. EABR (business) and ETLC (teaching)", *Conference Proceeding*, Venice, Italy.

**Appendix A- Measurement items for Constructs**

<b>Construct</b>	<b>Items</b>
<b>Environment awareness and concerns</b>	I am very much concern about the environment
	I know causes and effects of global warming
	We should be concerned about the environmental conditions under which our children may have to live
<b>Quality and price</b>	Price is the major concern for me to go for green electronics products
	I will switch to green product if it is available at the same price compare to my favourite brands.
	Quality is one of the most important factors what influences me for purchase of green electronics products
<b>Perceived consumer effectiveness</b>	I can protect the environment by buying the green electronic products.
	I contribute toward the saving of environment by buying the green electronic products.
	It gives me better feeling when I use green products.
<b>Promotional Activity</b>	Advertisement influences me more for purchasing green electronics products
	Advertisement provides the information about the green electronics products
	Information provided in the advertisement are convincing
<b>Consumer buying behavior toward green electronics products</b>	I do recommend to my friends and family members to buy green electronics products
	I feel good about buying products which are less damaging to the environment
	I am willing to make a special effort to buy products which are made from recycled materials.

## 18. A Study on Evaluating Role of Lead Bank in Financial Inclusion of Rural Areas

**Prof. Dr. Shiva Padme**

Research Guide, HOD (Accountancy), Prahladrai Dalmia Lions College of Commerce & Economics, Malad West, Mumbai.

**Prachi J. Mane**

Research Scholar, Assistant Professor, Jai Hind College, A road, Churchgate, Mumbai.

---

### **Research Center**

Prahladrai Dalmia Lions College of Commerce & Economics.

### **Abstract**

The Lead Bank Scheme has dual goals of increasing banking offerings and meeting the credit needs of the rural economy. A noteworthy program in the Indian economy, in which lead banks is essential to coordinating the activities of other banks and development organizations to promote complete development, particularly in undeveloped areas. The purpose of conducting this research is to evaluate the role of lead banks in the financial inclusion of rural areas. The technique used in this study is one sample t-test. The outcome of this study indicates that Facilitating Access to Financial Services, Developing Innovative Products, Investor Services, Capital Market Activities, Financial Literacy and Education, Collaboration and Partnerships, Risk Management, Technology Adoption, Allocation and underwriting, Data-driven Approaches, Economic Development, and Policy Advocacy were seen to be the significant role of lead banks in the financial inclusion of rural areas.

**Keywords:** lead banks, financial inclusion, rural areas.

### **Introduction**

To facilitate increased credit flow to key sectors such as exports, small companies, and agriculture, the Reserve Bank of India (RBI) implemented liberalization measures in its credit policy. Concurrently, the Government of India introduced measures for social control over banks in the late 1960s to align the banking system with economic planning goals and to better support sectors like agriculture and small businesses. This social control plan aimed to distribute available lending resources in line with economic and social objectives while also improving the mobilization of savings and addressing operational inefficiencies in the banking system. The

credit policy of the RBI emphasized the urgent need for commercial banks to increase their financing in priority sectors, including agriculture, exports, and small scale industries, during the lean year of 1967-1968. The nationalization of commercial banks in 1969 further solidified the commitment to ensure that no productive project, regardless of the borrower's size, would be deprived of financial support. These measures aimed to promote inclusive growth and ensure that essential sectors received adequate funding support for their development. (Dabhade, 2015)

The Lead Bank Scheme, initiated in late 1969 under Prof. D. R. Gadgil's guidance, addresses banking needs in underdeveloped and agricultural communities. It employs an area-based approach to bridge credit gaps. RBI implemented in 1969 it based on recommendations from Bankers Committee Nariman committee & Gadgil group. Lead banks coordinate credit institutions in designated districts, expanding services and meeting rural credit demands. This scheme is pivotal in India's agrarian, planned, and developing economy, with the banking sector driving growth. It stands as a significant initiative, coordinating efforts for comprehensive development in underdeveloped areas.

In the late 1960s, the RBI and the Government of India undertook measures to boost credit flow to vital sectors like exports, small businesses, and agriculture. The government's social control plan aimed to align banks with economic planning goals, emphasizing resource distribution in line with social and economic objectives. This move addressed operational inefficiencies and mobilized savings. Nationalizing commercial banks in 1969 further underscored the commitment to provide financial support to all productive projects. These steps aimed to foster inclusive growth and ensure crucial sectors received ample funding. The study's purpose is to evaluate the pivotal role of lead banks (Dabhade, 2015).

### **Review of Literature**

1. Bochare, K. V. et al (2019). The "Central Bank of India" served as the main bank for the research, which concentrated on the whole Amravati area. The results showed a significant increase in the district's total number of bank branches, total deposits, total advances, and the number of borrowers under the lead bank. These data point to the satisfactory performance of the main bank in these areas. The survey also looked at the quantities of past-due loans among farmers in various size categories. According to the findings, medium-sized farmers had the most past-due payments, followed by small- and large-sized farms. This suggests that addressing overdue loans among medium-

sized farmers should be a priority to improve loan repayment and overall financial stability in the agricultural sector.

2. Sahu, A., & Awasthi, P. K. (2020). This study used secondary data gathered from the main bank, the “Central Bank of India”, to evaluate the growth of bank branches, total advances (including agricultural lending), and total deposits during eight years (2008-09 to 2015-16). The findings revealed a substantial increase in the number of branches, indicating positive progress in financial inclusion. The study highlights the importance of cooperation among member banks and recommends the continuation of the lead bank scheme to further promote financial inclusion in non-banking areas of the district.
3. Singh, K., & Priya, A. (2021). This paper evaluates the performance of the lead bank scheme in facilitating formal credit flow to neglected priority sectors of the Indian economy. The study analyzes the achievements of targeted funds for the priority sector, including the agriculture & allied sector, the non-farm sector, and other priority sectors. The findings indicate a decline in the achievements of targeted funds over the years. The study is limited to the secondary data of the Bank of Baroda in Bareilly district, and it shows the impact of the lead bank scheme in bridging the financial gap in the Indian economy.
4. Sumalata, B. et al. (2022). The study analyzed the trends in fund allocation by lead banks to priority and non-priority sectors in Dharwad and Belagavi districts over a period of 15 years. The findings revealed a significant difference in the performance of various financial institutions in allocating funds, except for the agriculture sector in Dharwad district. The compound annual growth rate showed high growth rates in other priority sectors, while the education sector had the lowest growth rate.
5. Tamboli, M. A., & Sharma, M. P. (2018). The RBI introduced the lead bank scheme in 1969 to provide credit to rural areas for business and agricultural growth. The research findings show fluctuating achievements in credit disbursement, with low research findings show fluctuating achievements in credit disbursement, with low research findings show fluctuating achievements in credit disbursement, with low disbursement in agricultural term loans. Crop loan disbursement exceeded the target disbursement in agricultural term loans. Crop loan disbursement exceeded the target disbursement in agricultural term loans. Crop loan disbursement exceeded the target 13, while the Small

Scale Industries sector had an average achievement of in 2012-13, while the Small Scale Industries sector had an average achievement of 13, while the Small Scale Industries sector had an average achievement of Priority Sector 94.38%. Other Priority Sectors performed well in 2011 94.38%. Other Priority Sectors performed well in 2011-12, but Non-Priority Sector Agriculture and the allied sector had lower achievement saw a significant decline.

significant decline. Agriculture and the allied sector had lower achievement compared to other sectors.

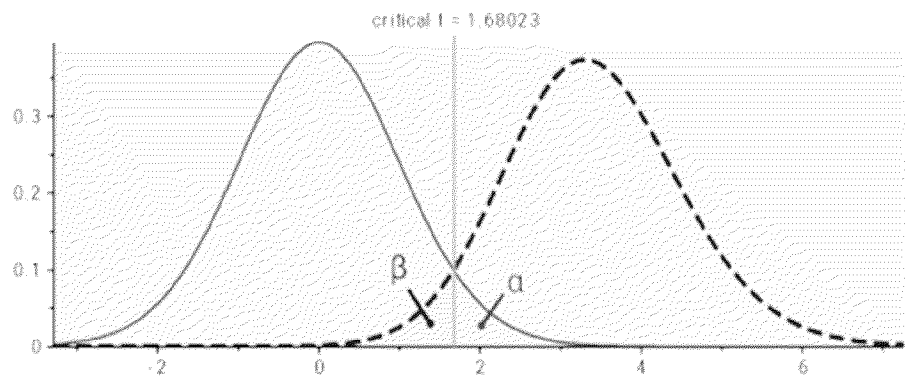
pared to other sectors.

**Objective of the Study**

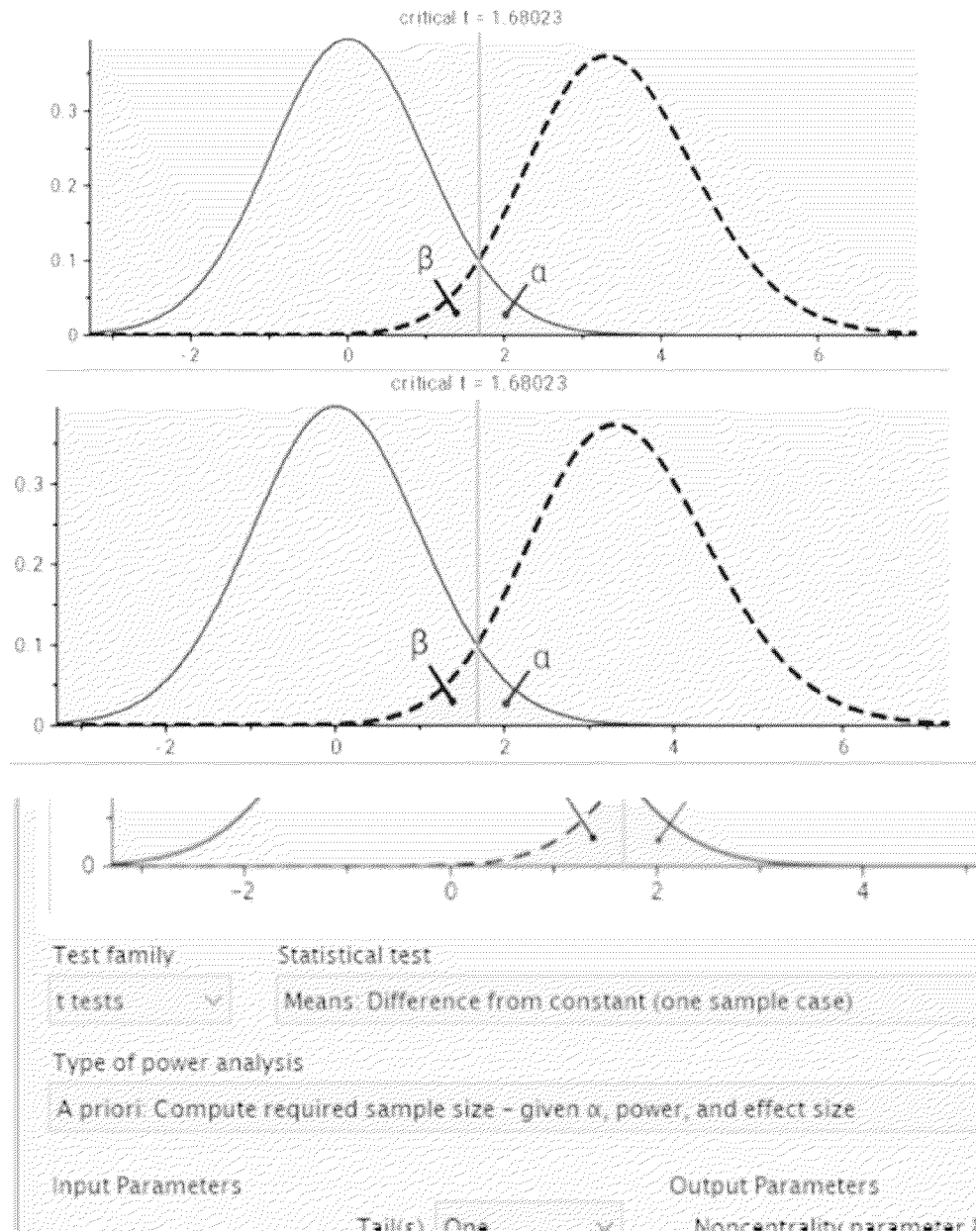
To evaluate the role of lead banks in the financial inclusion of rural areas. To evaluate the role of lead banks in the financial inclusion of rural areas. Hypothesis

- Ho: The role of lead banks in the financial inclusion of rural areas is insignificant. (Mean Ho: The role of lead banks in the financial inclusion of rural areas is insignificant. (Mean Ho: The role of lead banks in the financial inclusion of rural areas is insignificant. (Mean score <3) of lead banks in the financial inclusion of rural areas is significant (Mean score
- H1: The role of lead banks in the financial inclusion of rural areas is significant (Mean score of lead banks in the financial inclusion of rural areas is significant (Mean score > 3)

**Research Methodology**







For this study, a descriptive research design is employed. 30 bank managers were chosen as the study's sample size. Non-probability purposive sampling is the sampling method employed in the current investigation. There have been Both primary and secondary data gathering sources employed. R studio program has been utilized for the parametric one sample test. (According to Faul et al., the minimal sample size for a one-sample, one-tailed t test is 45.)

**Data Analysis and Interpretation**

Table No: 1 - One sample t-test

Items	t – statistics	P – value	H <sub>a</sub> : mean score of study on evaluating the role of lead banks in financial inclusion of rural areas > 3
Facilitating Access to Financial Services	17.98	0.000	Significant
Developing Innovative Products	16.11	0.000	Significant
Investor Services	18.09	0.000	Significant
Capital Market Activities	19.26	0.000	Significant
Financial Literacy and Education	19.33	0.000	Significant
Collaboration and Partnerships	17.55	0.000	Significant
Risk Management	16.11	0.000	Significant
Technology Adoption	16.90	0.000	Significant
Allocation and underwriting	18.33	0.000	Significant
Data-driven Approaches	19.33	0.000	Significant
Economic Development	18.77	0.000	Significant
Policy Advocacy	19.56	0.000	Significant

A parametric one-sample t-test (one-tailed) is applied to examine the significant role extracted through the exploratory research. It is seen that  $p$  (value)  $< 0.05$ , Facilitating Access to Financial Services, Developing Innovative Products, Investor Services, Capital Market Activities, Financial Literacy and Education, Collaboration and Partnerships, Risk Management, Technology Adoption, Allocation and underwriting, Data-driven Approaches, Economic Development, and Policy Advocacy were seen to be the significant role of lead banks.

**Conclusion**

Lead banks are pivotal in advancing rural financial inclusion. They establish branches and deploy mobile banking, bringing formal financial services closer to rural communities. Tailored products like microfinance and low-cost savings accounts cater to limited income individuals. Offering investor services and engaging in capital markets stimulates economic growth and mobilizes capital for rural businesses. Financial literacy programs enhance rural communities' financial knowledge and decision-making. Collaboration with microfinance institutions, NGOs, and community organizations extends service reach and ensures sustainability. Effective risk management safeguards the financial interests of lead banks and their rural customers. Technology adoption, including digital platforms and mobile banking, overcomes infrastructure challenges, providing convenient services. Data-driven approaches,

leveraging customer insights, help lead banks understand rural populations' unique needs. Lead banks also contribute to rural economic development by financing agriculture, small businesses, and infrastructure projects. Policy advocacy shapes supportive regulatory environments. Focusing on these factors empowers individuals and communities, fostering overall economic development through enhanced financial inclusion.

### References

1. Bochare, K. V., Ulemale, D. H., Agam, P. A., & Ingle, S. N. (2019). Performance of the lead bank in Amravati district. *Journal of Pharmacognosy and Phytochemistry*, 8(5), 1906-1910.
2. Borse, M. K., Birari, K. S., & Autkar, V. N. (2005). Targets and achievements of institutional credit through lead bank of Akola District in Vidarbha region of Maharashtra. *Indian Journal of Agricultural Economics*, 60(3), 393.
3. Dabhade S. K.. (2015). Review of Lead Bank Scheme in Kolhapur District During Financial Sector Reforms. Department of Commerce & Management. Shivaji University
4. Kambale, P. S., Lagare, M. G., & Deorukhakar, A. C. (2015). Credit disbursement scenario of lead bank (Bank of India) scheme in Ratnagiri district of Maharashtra. *International Research Journal of Agricultural Economics and Statistics*, 6(1), 78-82.
5. Pawar, M. S. (1984). Role of the Bank of Maharashtra A lead Bank in financing small-scale and cottage industries in Satara district.
6. Prameshwari, M. (2010) Functioning of lead banks a study with special reference to Dindigul district. Department of Commerce. Madurai Kamraj University
7. Sahu, A., & Awasthi, P. K. (2020). Credit and deposit growth of financial agencies under lead bank scheme in Jabalpur District of Madhya Pradesh. *Indian Journal of Economics and Development*, 16(2s), 104-111.
8. Singh, K., & Priya, A. (2021). PERFORMANCE APPRAISAL OF THE LEAD BANK SCHEME FOR THE PRIORITY SECTORS: A Study of Bareilly District. *NICE Journal of Business*, 16.
9. Sumalata, B., Guledagudda, S., & Kulkarni, G. (2022). Trends in the allocation of funds by lead bank to the priority and non-priority sectors in Dharwad and Belagavi districts.

10. Surendran, A., & Manoharan, B. (2012). Performance of lead bank scheme in Virudhunagar district of Tamilnadu. *Commerce and Management*, 1(6), 80-86.
11. Swain, B. M. (2018). Role of Lead Bank Scheme on Area Development: A Study with Special Reference to Chandbali Block of Odisha. *Shanlax International Journal of Economics*, 7(1), 36-41.
12. Tamboli, M. A., & Sharma, M. P. (2018). A Study on Achievement of Priority Sector Lending Under the Lead Bank of the Ahmednagar District. *IBMRD's Journal of Management & Research*, 7(1), 34-37.
13. Tambolia, M. A., & Bankarb, N. U. An analytical study on performance of commercial banks for agricultural loan disbursement with special reference to lead bank credit plan in Ahmednagar District. Editorial Review Board.
14. Blokdyk, G. (2018). *Exploratory Research The Ultimate Step-By-Step Guide*. (n.p.): Emereo Pty Limited.
15. Willson, V. L., Ross, A. (2018). *Basic and Advanced Statistical Tests: Writing Results Sections and Creating Tables and Figures*. Germany: SensePublishers.

## 19. Application and Implementation of Total Quality Management in the Higher Education System

**Aafrin Yusuf Khan**

Assistant Professor, Godavari Institute of Management and Research, Jalgaon.

---

### **Abstract**

In the current situation, the main thing is the quality of education. The quality of education is an important issue in many educational institutions around the world. The success of an educational institution depends on the quality of the education and learning system. The higher education system is the service sector, and to improve the performance of this sector, researchers and educators must apply the practices of total quality management in the education system.

The main purpose of this study is to identify the various applications of TQM and implementation of TQM in educational institutions. Reviewing new literature from the Internet and other sources, the works of W. Edward Demings on PDCA cycles are discussed. It is believed that this study can draw meaningful conclusions and create awareness about the challenges that may pose obstacles to the implementation of TQM in higher education.

**Keywords:** Quality of Education, TQM, implementation of TQM, PDCA cycle, Educational Institution.

### **Objective of the Study**

- To study the application and importance of TQM in higher education
- To identify challenges that may impede the application of TQM in education
- To analyze the implementation process of TQM in the education system.

### **Hypothesis**

TQM has sculptured higher education in a more appropriate manner.

### **Introduction**

Total quality management is the art of organizing everything correctly to achieve top performance. TQM is a set of guidelines, rules, and regulations focused on continuously improving the services or products offered to customers. Human resources and quality methods are used to improve all processes and meet all customers' needs. It integrates fundamental techniques, prevailing efforts, and practical equipment operated under a disciplined management approach.

Before the Second World War, Edwards Deming developed the Total Quality Management philosophy to improve the efficiency of flexible work teams in US industry. Deming expressed that management standards can be applied similarly to the educational sector, which also includes training.

The appropriate introduction of comprehensive quality management in the higher education system also requires a change in organizational regulations. Since everyone, from educators to administrative staff in the institution, strives to become better, management must give employees the space to do so. Each individual member must find the best way to improve and work on themselves and their students.

### **TQM Definitions**

According to Sarrico et al., quality can have numerous implications in higher education, and this assortment has significant influences on the improvement of techniques and instruments for estimating quality. Additionally, this assortment can make various partners for advanced education organizations.

Witcher (1990) expressed that Total Quality Management (TQM) is made up of three terms: Total: meaning that every individual is involved, including customers and suppliers, Quality: deducing that customers' necessities are met precisely; and management: indicating that top management is committed.

### **TQM for Higher Education System**

In the world, next to the US and China, India has the third-largest higher education sector. Higher Education's give top-to bottom information and see to propel the understudies to new Advanced education gives top-to-bottom information and sees to propel the understudies into new wildernesses of information from various different backgrounds. It widens the scholarly powers of the individual.

Today, the priority of the higher education system is setting and maintaining academic standards to improve the quality of education. In several ways, the concept of quality in higher education is related to industry, like quality as an enhancement or improvement, quality as excellence, quality as fitness for purpose, quality as zero errors, etc. The only difference between education and industry is the students, because students are not the product; the education of the students is the product.

Sangeeta et al. (2004) regard the education system as a development process consisting of observations of students, instructors, administrative staff, physical facilities, and procedures. The procedures consist of teaching, learning, and administration. While output consists of examination outcome, employment, profit, and satisfaction.

### **Importance of TQM in Higher Education System**

Total Quality Management (TQM) has been described as a management philosophy and mindset that has helped higher education institutions achieve educational excellence. To ensure high-quality services and meet market demands and stakeholder requirements, TQM needs to be widely used, recognized, and successfully implemented in the higher education system. In this modern century, it's very important to compete and achieve excellence to overcome the challenges faced by education institutes.

Roffe I.M. (1998) explained that, as a result of competition, students are increasingly becoming both customers and consumers and are expected to bear an increasing share of the cost of education. This concerns the competitive forces that produce different programs for different groups of students. There are many benefits of TQM implantation. First, TQM will support educational institutions to create upgraded services for their students and employers. Second, TQM's emphasis on continuous improvement is a crucial part of meeting the accountability requirements of educational reform.

### **Data Collection**

The researcher believes that the TQM has given a new shape and new dimensions to higher education. In pursuing the role of TQM higher education, the researcher has used secondary type data collection methodology. In the secondary data type of data collection methodology, researchers have reviewed 10 research papers, 2 PhD theses and 8 articles. Among the review of those research papers and articles, it has jointed out by researchers as TQM has played a key role in the development of higher education in the state.

The total data collection was made on the basis of secondary data and the data analysis is made accordingly.

### **Statistics**

As the data collection method is secondary data and the research work is based on research papers, articles and PhD thesis, the fact that the data collected is a qualitative type, therefore, the statistical methodology won't play an appropriate role in current research.

### **Analysis Method**

While collecting the data researchers has asset various web sites, laboratories and collect the relevant information based on role of TQM in higher education along with that researchers has also collected the secondary data who denotes the challenges enjoyed by TQM in higher education. Also during the analysis it has also pointed out by the research that still there is staunch need of implementing proper TQM system higher education.

As the higher education is the role of Indian government economic system, there for higher education is the backbone as well as higher education base on which the Indian, social, socio economic, financial, culture and more over all political citadel is best.

Therefore while analysis the considering all those factors along with objectives and in tune with hypothesis analysis is made and the findings are jointed out which mention accordingly.

### **Applications of TQM in Education system**

According to Akhtar (2000), Application of TQM in higher education will supply higher outcomes in all fields of the process of education as an amazing technique of management used and proved to give first-rate results in other commercial and business organizations.

The findings of the study demonstrate that educational institutions can successfully disseminate their gathered knowledge and improve their efficiency by utilizing complete quality management. Total quality management aids in completing the responsibilities and goals associated with educating future generations. TQM enhances the overall quality of the educational institution as well as management.

### **Challenges**

- **Poor coordination between Faculties and Departments:** insufficient trust between departments and faculty members' low confidence level of ability to manage the process of TQM
- **Lack of Management Commitment:** According to Brown et al., lack of top management commitment affects TQM efforts negatively, which is one of the main reasons for the failure of TQM efforts
- **High time Investment:** implementation of TQM requires a high time investment due to personal training.



- **Lack of Interest in Training:** due to a lack of interest in faculty development and administrative development training programs.
- **Lack of Highly Qualified Professionals:** TQM implementation requires highly qualified faculties and administrative and well-experienced staff.

Lack of knowledge about the self-assessment mechanisms

High expectation of immediate results.

### **Implementations of TQM in Higher Education System**

A strong need for everyone's participation in the institution and not just the involvement of the board of directors is required for the successful implementation of TQM. The introduction of TQM in the education system requires a number of changes.

### **Deming Cycle- PDCA for HEI**

Many researchers use the PDCA Cycle as the TQM model for higher education's institutes. PDCA cycles are a problem-solving technique used to improve business processes. This technique was developed by American physicist Walter A. Shewhart. It was proposed by Dr. W. Edwards Deming in the 1950s. Hence, it is also called the Deming Cycle. The higher education systems want to improve their quality of education, so they must use this model.

**Plan** step includes identifying the top management commitment and resource allocation; top management should understand the objectives for accomplishing their plan; senior executives should understand the development structures like procedures, responsibilities, criteria, and the overall infrastructure of institutes.

- **DO (Teach):** The plans are executed in the Do steps for implementing solutions to the problem. The various representative activities could include developing program content, selecting students, providing student assessment services, and providing some faculty development training to all faculties and administration
- **Check:** In the check steps, all the activities executed in the do stage are assessed for their performance. The top management must evaluate and assess to find out whether the teachers and staff at all stages are working to meet the requirements of all the stakeholders.
- **ACT (Revised Teaching):** This step involves taking measures and implementing changes in the education system to address the problems. Identified in the check step, such as what skills students acquired, what skills need further honing, and the

professional development of students. The representative activities included in the steps are student and alumni feedback, innovation in the program design, teaching methods, method delivery, student and faculty assessments, etc.

### Steps to implement TQM in Education System

- **Understanding:** The board of directors of the educational institute should identify the vision of TQM and understand its process.
- **Decision making Preparations for Change:** All the level professionals must make decisions for bringing in change for achieving quality and motivate their staff and faculties to adapt to changes.
- **Training for Faculties and Administrative Staff:** The institutes must conduct training programs to educate faculties and guide them to carry on their work so that they will participate in the process of achieving the objectives of the institutes towards quality.
- **Initiative:** The institution must initiate new missions and projects on its own initiative. As a result, the higher education system may choose a capable leader to start and inspire other staff to deliver high-caliber work.
- **Evaluation:** The HE must analyze its performance every year for quality sustenance and improvement. The institution will be able to pinpoint any issue that is keeping it from achieving TQM at this point and may take action to remove it.
- **Recognition:** This is required to inspire faculty or employees, as it will raise their morale and serve their own interests.
- **Continuous Improvement:** TQM is a never-ending process. All levels of staff need to be informed about the TQM process on a regular basis.

### Suggestion of the Study

It is strongly suggested to higher education institutions that the TQM system that they should adopt TQM as per the standards derived for TQM. Also the precaution should be taken care from the platform of government machinery about the proper implementation of TQM system in higher educational institutes.

It is recommended to higher educational system that on the eve of new education policy specific scope should be reserved for total quality management concept in the new educational policy.

## **Conclusion**

From the above study, the literature and secondary data available also support the facts and arguments that TQM has great importance in the field of higher education. With the use of TQM, an academic institution would be able to create its own standards of quality and quality improvement procedures in light of client requirements. Total Quality Management in Education will give better outcomes in all fields of the process of education as an excellent technique of management used and proved to give excellent results in other industrial and business organizations (Akhtar, 2000).

This study shows that TQM adds value by improving quality and ensuring growth, and it will have a great impact on the institution's goals, mission, and vision. Although TQM implementation has a significant impact on the higher education system, To conclude, TQM cannot be implemented over night; hence, the education institutes must analyze various challenges carefully for effective implementation of TQM to achieve nonstop improvement (Pushpa L. 2015).

## **References**

1. Sarrico, C.S., Rosa, M.J., Teixeira, P.N and Cardoso, M.F. (2010) Assessing Quality and Evaluating Performance in Higher Education: Worlds Apart or Complementary Views? *Minerva*, 48, 35-54. <https://doi.org/10.1007/s11024-010-9142-2>
2. Sangeeta, S., Banwet, D. K., &Karunes, S. (2004). Conceptualizing total quality management in higher education. *The TQM Magazine*, 16(2): 145-159.
3. Brown, M.G., Hitchcock, D.E and Willard, M.L. (1994) why TQM fails and what to do about it. Irwin, Burr Ridge.
4. Akhtar, M. S. (2000). Total qualitymanagement and its application in education in Pakistan. *Journal of Elementary Education*, 10(2), 29-43.
5. M.S. Farooq, M. S. Akhtar, S.ZiaUllah, R.A. Memon, Application of total quality management in education”, *Journal of Quality and Technology Management* Volume III, Issue II, Dec 2007, pg 87-97.
6. Suman Ghosh, “Total Quality Management in Higher Educational Institutions: A Study” © 2018 JETIR November 2018, Volume 5, Issue 11 [www.jetir.org](http://www.jetir.org) (ISSN-2349-5162).

7. Roffe.I.M.,(1998). 'concept problems of continuous improvement and innovation in higher education' Quality Assurance in Education ,6(2), pp.74-82.
8. Md. Masum Billah\*, Md. RezaullKarim, Implementation of TQM in Education”, International Journal of Scientific and Research Publications, Volume 11, Issue 2, February 2021 259 ISSN 2250-315.
9. Pushpa L “Implementation of Total Quality Management in Higher Education Institutions “International Journal of Scientific Engineering and Research (IJSER) www.ijser.in ISSN (Online): 2347-3878, Impact Factor (2015): 3.791.

## 20. Causal Relationship between Macroeconomic Variables and Index of Industrial Production (IIP)

**Basutkar Thirupathi**

Assistant Professor, Department of Business Economics, Uttari Bharat Sabha's Ramanand Arya D. A. V. College (Autonomous), Station Road, Datar Colony, Bhandup (East), Mumbai.

---

### **Abstract**

IIP is a benchmark index used to measure industrial production in India. The present paper attempts to estimate the significance of various macroeconomic variables on industrial production in India.

**Key Words:** IIP, Macroeconomic Variables.

### **1. Introduction**

IIP is an Index of Industrial Production compiled and published a monthly basis by CSO. It is a benchmark index used to measure industrial production in India. The industrial production index of India is fairly comprehensive covering mining, manufacturing and electricity<sup>1</sup>. Variation in IIP is tracked by policy makers and alike to gauge performance of the economy and arrive at policy decisions. The objective of the present paper is to estimate the significance of various macroeconomic variables that influence the fluctuations in IIP.

### **2. Literature Review**

Finding the relationship between key macroeconomic variables and economic activity has been the interest area of many research studies. (Salam Shantikumar Singh, 2016) suggests the presence of both seasonal and trend effects in IIP. (Mwangi, 2013) identified real petroleum prices, real exchange rate, import of goods and services and government spending as the key macroeconomic factors that influence industrial production in Ghana. (Lavinia Mihaela Gutu, 2015) captures the macroeconomic variables' impact on the firms' ability of maintaining balance in terms of debt service and yield results. (Patra, 2017) study finds the evidence of a positive and long-run relationship between automobile sales and GDP per-capita<sup>2</sup>. The present paper attempt to highlight the significance of various macroeconomic variables on industrial production in India for the period ranging from 2017 to 2023.

### 3. Objectives

To estimate the significance of various macroeconomic variables that influence the fluctuations in Index of Industrial Production of India (IIP) for the period 2017 to 2023.

#### 3.1 Proposition

There is a causal and significant relationship between various macroeconomic variables and industrial production index

### 4. Methodology

Ordinary least square technique is used to estimate the causal relationship between IIP and key macroeconomic variables like WPI, Net FDI, External Commercial Borrowings, foreign trade, bank rate and foreign exchange reserves. The data for the study for the period ranging from 2017 to 2023 has been taken from RBI's Statistical Handbook<sup>3</sup>

### 5. Analysis and Interpretation<sup>4</sup>

Period	IIP	WPI (2011- 12=100)	Net FDI (\$ Mn)	FDI (\$ Mn)	ECB (\$ Mn)	Exports (\$ Mn)	Imports (\$ Mn)	Bank Rate (%)	Forex Reserves (\$ Mn)
Jul-23	142	151.9	749	1,639	2,559	34,475	52,956	6.75	6,04,052
Jun-23	143.4	148.9	-550	205	7,959	34,350	53,101	6.75	5,94,633
May-23	145.1	149.4	2705	2,911	7,648	34,984	56,995	6.75	5,94,530
Apr-23	140.5	151.1	2797	4,017	5,360	34,655	50,142	6.75	5,86,049
Mar-23	151.7	151	1274	2,392	3,840	41,958	60,921	6.75	5,70,486
Feb-23	139.3	150.9	1716	2,860	644	37,014	53,582	6.69	5,66,106
Jan-23	147.4	150.7	3364	4,066	1,777	35,799	52,826	6.5	5,71,018
Dec-22	145.9	150.5	1870	3,575	2,768	38,085	61,219	6.43	5,62,878
Nov-22	137.7	152.5	-1008	1,575	5,203	34,887	56,951	6.15	5,43,026
Oct-22	129.5	152.9	1168	2,177	1,430	31,602	57,911	6.15	5,29,209
Sep-22	133.8	151.9	1567	2,566	2,709	35,391	63,372	5.75	5,43,962
Aug-22	131.5	153.2	748	1,968	1,875	37,018	61,879	5.65	5,67,204
Jul-22	134.4	154	3893	4,563	2,616	38,336	63,771	5.15	5,74,600
Jun-22	138.3	155.4	2755	3,869	1,889	42,280	64,353	5.05	5,93,948
Jun-22	138.3	155.4	2755	3,869	1,889	42,280	64,353	5.15	5,74,600
May-22	137.8	155	5311	6,043	1,516	39,004	61,126	5.05	5,93,948
Apr-22	134.5	152.3	5326	6,350	362	39,698	58,058	4.65	5,97,026
Mar-22	148.8	148.9	3052	5,145	5,042	44,574	63,091	4.25	6,01,462
Feb-22	131.4	145.3	4657	5,169	2,328	37,154	55,898	4.25	6,19,599
Jan-22	139.3	143.8	6067	6,939	7,979	35,233	52,567	4.25	6,31,655
Dec-21	138.8	143.3	1351	2,851	5,549	39,270	60,330	4.25	6,32,936
Nov-21	128	143.7	2192	3,330	2,399	31,795	53,025	4.25	6,35,219
Oct-21	135	140.7	1016	2,659	1,339	35,728	53,638	4.25	6,39,769
Sep-21	129.5	137.4	2031	4,276	4,023	33,815	56,286	4.25	6,40,661
Aug-21	132.4	136.2	5115	6,004	2,847	33,381	45,093	4.25	6,39,866
Jul-21	131.5	135	1552	2,620	3,434	35,513	46,147	4.25	6,22,821
Jun-21	122.8	133.7	354	2,555	1,485	32,493	42,098	4.25	6,14,087
May-21	115.1	132.9	8802	#####	738	32,299	38,835	4.25	6,07,207
Apr-21	126.1	132	2398	4,330	2,723	30,751	46,044	4.25	5,92,638
Mar-21	145.6	129.9	755	2,067	9,233	35,257	48,899	4.25	5,83,937
Feb-21	129.9	128.1	442	1,782	2,577	27,633	40,749	4.25	5,80,152

Jan-21	136.6	126.5	1482	1,902	3,744	27,538	42,030	4.25	5,84,015
Dec-20	137.4	125.4	6239	7,130	2,994	27,216	42,935	4.25	5,86,461
Nov-20	126.7	125.1	7170	8,024	2,045	23,620	33,812	4.25	5,81,042
Oct-20	129.6	123.6	3971	4,840	2,033	24,920	34,074	4.25	5,72,844
Sep-20	124.1	122.9	2594	4,118	5,223	27,559	30,518	4.25	5,56,968
Aug-20	117.2	122	18247	#####	1,751	22,829	31,034	4.25	5,43,274
Jul-20	117.9	121	3584	4,261	2,148	23,782	29,116	4.25	5,38,106
Jun-20	107.9	119.3	-914	64	1,022	22,033	21,324	4.25	5,22,799
May-20	90.2	117.5	200	755	1,491	19,247	22,860	4.45	4,88,969
Apr-20	54	119.2	186	1,286	996	10,173	17,086	4.65	4,79,144
Mar-20	117.2	120.4	3974	4,937	7,437	21,491	31,471	5.1	4,77,852
Feb-20	134.2	122.2	2737	4,020	4,175	27,743	37,904	5.4	4,76,689
Jan-20	134.5	123.4	5252	6,229	8,401	25,853	41,150	5.4	4,65,341
Dec-19	134.5	123	4326	5,512	2,097	27,096	39,594	5.4	4,56,297
Nov-19	128.8	122.3	2770	3,657	2,116	25,744	38,523	5.4	4,48,366
Oct-19	124	122	2646	4,064	3,415	26,212	37,986	5.4	4,42,286
Sep-19	122.9	121.3	1981	2,950	4,889	26,014	37,695	5.65	4,29,682
Aug-19	126.2	121.5	1851	2,762	3,317	25,988	39,852	5.72	4,29,536
Jul-19	131.8	121.3	3482	4,681	4,981	26,232	40,431	6	4,29,444
Jun-19	129.3	121.5	6789	7,570	5,399	25,027	41,032	6	4,26,552
May-19	135.4	121.6	2818	4,084	3,548	29,850	46,683	6.25	4,19,720
Apr-19	126.5	121.1	4386	5,540	3,158	26,038	42,387	6.25	4,15,333
Mar-19	144.1	119.9	789	3,240	12,725	32,725	43,690	6.5	4,05,605
Feb-19	127.6	119.5	1949	2,503	2,812	26,862	36,591	6.56	3,98,963
Jan-19	134.4	119.2	3682	4,047	2,417	26,407	41,455	6.75	3,97,074
Dec-18	133.9	119.7	3112	4,237	3,806	27,858	42,351	6.75	3,93,387
Nov-18	126.1	121.6	1077	1,585	2,066	26,072	43,655	6.75	3,93,245
Oct-18	132.8	122	3120	4,544	1,411	26,674	44,678	6.75	3,94,919
Sep-18	128.8	120.9	3615	4,671	1,706	27,866	42,820	6.75	4,00,522
Aug-18	128	120.1	1987	2,544	4,827	27,808	45,731	6.75	4,01,166
Jul-18	125.7	119.9	1809	2,806	2,175	25,754	44,388	6.5	4,05,055
Jun-18	127.7	119.1	1645	3,015	2,714	27,158	44,807	6.45	4,09,857
May-18	129.6	118.3	3668	4,638	1,347	28,945	43,917	6.25	4,16,130
Apr-18	122.6	117.3	4260	5,473	3,917	25,949	39,967	6.25	4,23,724
Mar-18	140.3	116.3	2051	3,214	5,075	29,167	42,801	6.25	4,22,095
Feb-18	127.4	116.1	2668	3,077	3,100	26,031	37,871	6.25	4,20,997
Jan-18	132.3	116	1689	2,314	540	25,408	40,701	6.25	4,14,381
Dec-17	130.6	115.7	2736	3,285	1,305	27,833	42,031	6.25	4,03,703
Nov-17	125.8	116.4	956	1,553	3,039	26,293	41,390	6.25	3,99,577
Oct-17	122.5	115.6	632	1,148	4,406	22,889	37,501	6.25	3,99,660

Regression Statistics

Multiple R	0.888264
R Square	0.789013
Adjusted R Square	0.761343
Standard Error	6.527165
Observations	70

ANOVA

	df	SS	MS	F	Significance F
Regression	8	9718.693	1214.837	28.5147	7.07E-15
Residual	61	2598.836	42.60388		
Total	69	12317.53			

	Coefficients	Standard Error	t Stat	P-value
Intercept	80.11391	13.49704	6.300577	2.66E-08
WPI	-0.88028	0.188655	-4.66606	1.73E-05
NFDI	0.00284	0.001776	1.599063	0.114974
FDI	-0.00226	0.001842	-1.22531	0.22517
ECBs	0.000953	0.00037	2.574721	0.012474
Exports	0.001579	0.000379	4.92284	6.11E-06
Imports	0.00046	0.000231	1.994965	0.050519
Bank Rate (%)	6.645738	1.655783	4.013652	0.000166
Forex Res	8.47E-05	3.01E-05	2.810579	0.006659

## 6. Conclusion and Findings

The regression findings suggest a clear and conclusive relationship between IIP and the key macroeconomic variables. Wholesale price index and FDI data are negatively related to Industrial production in India. Though inverse relation of FDI data to IIP is not significant. Net FDI, ECB's, Foreign Trade, Forex Reserves and Bank rate are positively and significantly related to IIP.

## 7. References

- Lavinia Mihaela Gutu, A. I. (2015). The Macroeconomic Variables' Impact on Industrial Production in the Context of Financial Crisis. *Procedia Economics and Finance*, 32, 1258-1267.
- Mwangi, F. K. (2013). The effect of macroeconomic variables on financial performance of aviation industry in Kenya. Nairobi: University of Nairobi.
- Patra, T. (2017). Impact of Macroeconomic Factors on Automobile Demand in India. *Journal of International Economics* (0976-0792), 8(1), 8(1), 97-113. Retrieved from <https://www.ipeindia.org/wp-content/uploads/journals/jie/joie-jan-june-2017.pdf#page=99>
- Salam Shantikumar Singh, T. L. (2016). Time Series Analysis of Index of Industrial Production of India. *IOSR Journal of Mathematics*, 01-07.

## Footnotes

- <https://mospi.gov.in/54-index-industrial-production>
- Patra, T. (2017). Impact of Macroeconomic Factors on Automobile Demand in India. *Journal of International Economics* (0976-0792), 8(1).
- <https://cimsdbie.rbi.org.in/#/dbie/home>
- Index of Industrial Production (IIP), Net Foreign Direct Investment (NFDI) (US \$ Million), Net Portfolio Investment (NFPI) (US \$ Million), Total Investment Inflows (US \$ Million), Bank Rate (%), Foreign Exchange Reserves (US \$ Million)