



# **KLE SOCIETY'S S. NIJALINGAPPA COLLEGE**

**II Block, Rajajinagar, Bengaluru -10, Karnataka, India  
Re-accredited by NAAC at A+ Grade with 3.53 CGPA  
College with UGC STRIDE Component - I**



**DEPARTMENT OF COMMERCE AND RESEARCH  
PROCEEDINGS**

**OF**

**MANAGEMENT SPONSORED IQAC INITIATED  
TWO DAY NATIONAL LEVEL SEMINAR**

**“GROWING INFRASTRUCTURE -  
A KEY TO TRANSFORMING INDIAN ECONOMY”**

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# Growing Infrastructure A key to Transforming Indian Economy



**K.L.E SOCIETY'S**  
**S. NIJALINGAPPA COLLEGE**  
Reaccredited by NAAC at "A+" grade with 3.53 CGPA  
College with UGC Stride Component – 1  
II Block, Rajajinagar Bangalore - 10



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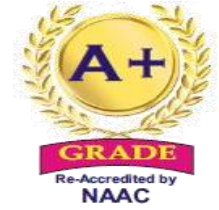
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S. Nijalingappa College**



II Block, Rajajinagar, Bengaluru-560010

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**CGPA College with UGC STRIDE Component–I**

**Proceedings**

**of**

**Management Sponsored IQAC initiated  
Two day National Level Seminar**

**“Growing Infrastructure – A Key to  
Transform Indian Economy”**

**Organized by  
Department of Commerce  
2022-2023**

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## Growing Infrastructure A key to Transforming Indian Economy

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### Inauguration

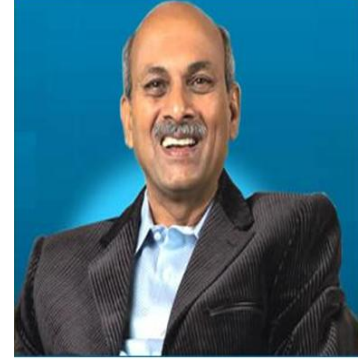
Invocation	Ms. Pavithra & Team	<b>10:00 AM</b>
Welcome Speech	Mr. Shivakumar M Sajjan	<b>10:05 AM</b>
About the Seminar	Dr. C V Koppad	<b>10:10 AM</b>
Lighting the lamp	All the Dignitaries	<b>10:15 AM</b>
Address by Chief Guest	Dr. Jalaja K R. Associate Prof. BCU	<b>10: 20 AM</b>
Guest of Honor	Smt. Navitha Jain	
	News TV18, Bengaluru	<b>10:40 AM</b>
Presidential Remarks	Dr. Arunkumar B. S.	<b>10:50 AM</b>
Vote of Thanks	Dr. Murali S.	<b>10:55 AM</b>

### Valedictory

Invocation	Ms. Swathi and Team	<b>04:00 PM</b>
Welcome Speech	Dr. Murali S.	<b>04:05 PM</b>
Report on 2 day National Seminar	Dr. Jagadish Hudagi	<b>04:10 PM</b>
Address by Chief Guest	Dr. R. Goutham Asst. Prof. Christ University	<b>04:10 PM</b>
Presidential Remarks	Dr. Arunkumar B. Sonappanavar	<b>04:20 PM</b>
Vote of Thanks	Mr. Yogesh Kumar A B	<b>04:25 PM</b>

## **Chairman's Message**

The K.L.E. Society, the largest Educational organization in South Asia was established in 1916 by seven dedicated and selfless teachers who are revered as “Saptharishis”. It has been transformed into a veritable movement in providing quality education over the past 100 years. The legacy of



Society and its core values are being lead by our **Chairman Dr. Prabhakar B Kore** since 1983. The K.L.E. family now encompasses over 18,000 staff serving in 292 Institutions catering to the needs of more than 1.4 lakh students. The Society has one of the rarest distinctions of being conferred with two ‘Deemed to be Universities’, one in Medical Education and the other in Technical Education. In 2016, the Society celebrated its Centenary. Honorable **Prime Minister Shri Narendra Modi** graced the occasion, acknowledged the sacrifice and yeoman service of “Saptharishis” and the Management.



**Message by**  
**Shri. Mahantesh M. Kavatagimath**  
**Chief Whip, Government of**  
**Karnataka Member, Board of**  
**Management**  
**KLE Society Belagavi**

Warm Greetings...

Being in the framework of this two day national seminar, I take immense pleasure to welcome all the attendees of the seminar on “**Growing Infrastructure A key to Transforming Indian Economy**”. This is a timely arranged national level platform organized to offer novel thoughts and research findings of students, academicians. I hearty congratulate the principal and his team for their timely organization of this national level seminar and providing an easy and safe platform.

I wish the two day seminar a huge hit and thought provoking in formative proceedings that disseminate knowledge to the entire stake holder of this organization.





**Message by**

Shri. Shankaranna I. Munavalli  
Member, Board of  
Management  
KLE Society, Belagavi

Warm Greetings...

This is my privilege and I am so enthusiastic to welcome you all for Management Sponsored. Two day national seminar on “**Growing Infrastructure A key to Transforming Indian Economy**” an Approach to Research on 30<sup>th</sup> & 31<sup>st</sup> march 2023 organized by KLE Society’s S. Nijalingappa College Bengaluru. It is worth mentioning that the sub-themes of the seminar are related to the national level Research. The seminar will help in understanding the concept with respect to latest innovation/technology in the field of Commerce.

I am very sure that this two national level seminar including keynote address, special talk and academic/research work presentations will be helpful for the participants.

**Message by**

**Dr.Arunkumar B. Sonappanavar, Principal  
KLE Society's. S Nijalingappa College  
Rajajinagar, Bengaluru-560010**



Indeed it is pleasure to introduce “**Growing Infrastructure A key to Transforming Indian Economy**” IQAC initiated UGC-STRIDE sponsored by Department of Commerce and Research Center, KLE Society's. S. Nijalingappa College, Bengaluru it covers recent trends in commerce and business different facets which are impactful on the two day national level seminar as a part of revolutionary change in corporate sector requirements. The task in front of academicians is to develop an atmosphere which always in pursuit of knowledge. In this regard it is an attempt to inculcate traits which are essential in constantly changing new avenues.

Since learning is never ending process especially in commerce and management. This edited volume considered as value addition to the existing body of knowledge. I expect this academic deliberation of scholarly research will enlighten the faculty members, researchers and students on recent strides.

I look forward this edited volume help immensely. I congratulate the committee members so that it will boost the knowledge of all stake holders.

Dr Arunkumar B. Sonappanavar  
**PRINCIPAL**

**Message by**

**Dr. C. V. Koppad**

H.o.D Commerce

KLE Society's S Nijalingappa College

**Rajajinagar, Bengaluru- 560010**

Present corporate world is in a state of constant change which is inevitable. The primary responsibility from field of Commerce and management is to equip students with the relevant knowledge, skills, and attributes necessary to navigate an ever-changing future. While we have always adopted a student-centric approach to learning and have laid particular emphasis on industry needs. Department of Commerce KLE Society's S. Nijalingappa College, Bengaluru. The **“Growing Infrastructure A key to Transforming Indian Economy”** in particular highlights the need of circumstance to uncover the progress and various challenges in social science research. A selected numbers of research abstract full papers taken in to consideration for presentation and publication.

I thank all the members of board and management, the secretary, life members and Principal for extending their support and valuable guidance to make event successfully. I extend my gratitude to my colleagues who extended their support in making this event a grand successful regard.

**Message by**

**Sri Chandrashekarappa A. S**

**HoD Department of Mathematics**

**IQAC Coordinator**

**KLE Society's S. Nijalingappa College**

**Bengaluru-560010**

We are happy to publish the “**Growing Infrastructure A key to Transforming Indian Economy**”, prepared by Department of Commerce and Research Center, KLE Society's S. Nijalingappa College Bengaluru.

It is our sincere effort to meet the research needs of academicians, research scholars and students to address the societal and economic issues. After the peer blind review process, research papers are selected for publication.

We are thankful to our Hon'ble Chairman Dr. Prabhakar B. Kore Members of Board of Management, Principal and Colleagues for having extended their support and valuable guidance in publishing this research papers.

### **About the KLE Society**

The K.L.E. Society, the largest Educational Organization in South Asia, established in 1916 by seven dedicated and selfless teachers “Saptharishis”. It has been transformed into a veritable movement in providing quality education over 100 years. The legacy of Society and its core values are being led by our Honorable Chairman Dr. Prabhakar B. Kore, since 1983. The K.L.E. family now encompasses over 16,000 staff serving in 282 Institutions catering to the needs of more than 1.25 lakh students. The K.L.E. Society has one of the rarest distinctions of being conferred with two “Deemed Universities Status” one in Medical Education and the other in Technical Education.

### **About the College**

S. Nijalingappa College is one of the premier higher educational institutions managed by the K.L.E. Society. Since its inception in 1963, the college has carved a niche for its quality education. The College is re-accredited at “A+” Level by NAAC 3rd Cycle with CGPA of 3.53 on 4.0 scale recognized as “College with Potential for Excellence”– Phase II by UGC and UGC STRIDE Component I. The college sprawls over 4.92 acres in the heart of the city with the State-of-the-Art infrastructure. It offers a wide variety of programs at undergraduate and postgraduate levels with a judicious focus on traditional and professional domains.

### **About the Department**

The department of commerce, set up in 1971, has the legitimate claim and pride of being the premier department with research centre status conferred on it by the affiliating university. In its history spanning over five decades, it has produced doctorates, university ranks, excellent academicians, researchers and entrepreneurs. It offers B.Com, M.Com. & PhD programs affiliated to Bengaluru City University, Bengaluru, along with Value Added & Certificate Courses. It is well equipped with e-Class Rooms, Computer Labs, Business Labs & Department Library with more than 50 National and International Journals.

### About the Seminar:

The infrastructure is a key driver of the Indian economy, and critical for driving India's overall development, offering enhanced growth prospects to strengthen India's global competitiveness. During the next decade India is on the edge to experience a huge need for private investment and overseas funding in infrastructure as cities become more connected, districts within cities become more accessible and urban-rural connectivity improves. Specified the government's thrust on the ease of doing business and ease of living, government's policies need faster implementation. Infrastructure is important for increasing the country's economic growth and the integration of the Indian economy with other economies of the world.

### Objectives of the Seminar:

- To understand the need for the growing infrastructure for the economic development of the country
- To evaluate various government initiatives towards infrastructure development
- To know the role of infra-financiered, Insurance& sustainability

### Call for Paper - Sub Themes

<b>Banking &amp; Finance:</b> <ul style="list-style-type: none"><li>➤ Cashless Economy &amp; Digitalization</li><li>➤ Corporate Governance</li><li>➤ Banks NPA's</li><li>➤ Green Banking</li><li>➤ Mergers &amp; Acquisition</li><li>➤ Fintech</li></ul>	<b>Information System &amp; Technology:</b> <ul style="list-style-type: none"><li>➤ E-Business</li><li>➤ Artificial Intelligence</li><li>➤ Information System</li><li>➤ Block Chain &amp; Big Data</li><li>➤ Robotics</li><li>➤ Cloud Computing</li></ul>
<b>Transportation:</b> <ul style="list-style-type: none"><li>➤ Road</li><li>➤ Airports &amp; Waterways</li><li>➤ Railway</li><li>➤ Public &amp; Private Transportation System</li></ul>	<b>Social Infrastructure:</b> <ul style="list-style-type: none"><li>➤ Health Care &amp; Education</li><li>➤ Food Scarcity</li><li>➤ Employability</li><li>➤ Drinking Water &amp; Sanitation</li></ul>

➤ ***Participants & Beneficiaries***

Academicians, Research Scholars & PG Students

***Schedule of the two day national seminar***

<b>Date</b>	<b>Events</b>	<b>Resource Person</b>	<b>Topic</b>	<b>Timings</b>
<b>30/3/2023</b>	Technical Session - I	Dr. Bipin Sony	<b>Banking and Finance</b>	<b>11:15 AM</b>
			<b>Lunch Break</b>	<b>01:00 PM</b>
	Technical Session - II	Prof. Ramesh S Mount Carmel College Bengaluru	<b>Employability</b>	<b>01:30 PM</b>
			<b>Tea Break</b>	<b>03:00 PM</b>
	Technical Session - III	Dr. Ravikumar B. M GFGC, Malleshwaram	<b>Paper Presentation</b>	<b>03:30 PM</b>
			<b>Refreshment</b>	
<b>31/3/2023</b>	Technical Session - IV	Dr. Satish H K Asst. Prof. Govt. RC Commerce & Management College	<b>IS&amp;T</b>	<b>10:00 AM</b>
	Technical Session - V	Dr. Shrimant Tangade Prof. GFGC Rajajinagar	<b>Paper Presentation</b>	<b>11:30 AM</b>
			<b>Lunch Break</b>	<b>01:00 PM</b>
	Technical Session – VI	Dr. R. Goutham Asst. Prof. Christ University	<b>Corporate Governance</b>	<b>01:30 PM</b>
			<b>Tea Break</b>	<b>03:30 PM</b>

**Organized Committee**

Dr.ArunKumar B.Sonappanavar	: Chairperson
Sri. Chandrashekarappa A. S	: IQAC Co-ordinator
Dr. C. V.Koppad	: HoD of Commerce
Sri. Shivakumar M. Sajjan	: Convenor
Dr. Murali.S	: Organising Secretary
Dr.Jagadish M .H	: Joint Secretary

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Ms.Rakshana R.	Smt.Rekha K. N.
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Sri. Sudheer C.S.	: Founder & CEO, Freedom App. India
Dr. Jalaja K. R.	: Associate Professor of Commerce, Bengaluru City University, Bengaluru
Dr. Ramesh S.	: Professor and Dean faculty of Commerce and Management, Mount Carmel College, Bengaluru



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**Contemporary Review of ‘Make in India’ and its contribution to the  
infrastructural Development of India including Cashless Economy**

**Anwita Mukherjee**

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**Abstract:**

Make in India initiative is an honest attempt to revive the fortunes of manufacturing sector which is key to revival of Indian economy. The literatures on "Make in India" highlights the potential benefits of the initiative, particularly in the areas of FDI, manufacturing sector growth, employment generation, and ease of doing business. However, they also highlight the challenges associated with the initiative and the need for further improvements in areas such as infrastructure, skilled labor, and bureaucratic processes. While several research studies have been conducted on "Make in India," there are still significant research gaps that need to be addressed to fully understand the impact of this initiative on the Indian economy.

There is still scope for improvement in areas infrastructure and skill development. There is still a long way to go to achieve the initiative's goals of make in India a global manufacturing hub.

"Make in India" has contributed to financial inclusion in India by creating jobs, improving access to finance, promoting the development of micro-enterprises, and promoting digital payments.

"Make in India" has contributed to the promotion of a cashless economy in India by promoting the development of digital infrastructure, manufacturing of digital devices, payment solutions, startups, and government initiatives. These initiatives have helped to reduce the use of cash and promote digital payments in India. Besides positive impacts, addressing of the Make in India limitations will be crucial for sustained growth and competitiveness in the long run.

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**Keywords:** *Make in India, Cashless economy, Infrastructural development.*

### **Introduction:**

"Make in India" is an initiative launched by the Government of India in September 2014, aimed at promoting India as a global manufacturing hub and attracting foreign investment. The initiative focuses on 25 sectors of the economy, including automobiles, chemicals, information technology, pharmaceuticals, textiles, and tourism, among others.

The primary objective of the Make in India initiative is to boost domestic manufacturing and make India a global manufacturing destination, thereby creating job opportunities and reducing the country's dependence on imports. The government has implemented various measures to make it easier to do business in India, including simplifying the regulatory framework, increasing foreign investment limits, and improving infrastructure.

The initiative has been successful in attracting foreign investment in various sectors, and several global companies have established manufacturing units in India. Make in India has also contributed to the growth of the Indian economy and the creation of jobs in various sectors.

However, the initiative has also faced criticism for failing to create enough jobs and for not adequately addressing issues such as labor laws and infrastructure bottlenecks. Nonetheless, the Indian government remains committed to the Make in India initiative and continues to work towards improving the country's manufacturing capabilities.

### **Literature Review:**

The "Make in India" initiative launched by the Indian government in 2014 has attracted significant attention from scholars and researchers. Here is a brief literature review on the topic:

1. **Impact on FDI:** Several studies have focused on the impact of "Make in India" on foreign direct investment (FDI) in India. For example, a study by Alokesh Barua and Debdatta Pal found that the initiative had a positive impact on FDI inflows, particularly in the automobile, chemical, and pharmaceutical industries.
2. **Manufacturing sector growth:** Studies have also evaluated the impact of "Make in India" on the growth of the manufacturing sector in India. A study by Sougata Poddar and

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Tirthankar Nag found that the initiative had a positive impact on the growth of the manufacturing sector, particularly in the areas of machinery, textiles, and leather.

3. **Employment generation:** Several studies have also evaluated the impact of "Make in India" on employment generation in India. For example, a study by Aditi Bhattacharyya and Rajashree Datta found that the initiative had a positive impact on employment generation, particularly in the areas of construction, textiles, and leather.
4. **Ease of doing business:** Studies have also evaluated the impact of "Make in India" on the ease of doing business in India. A study by Sujatha Srinivasan and Arvind Dhar found that the initiative had a positive impact on the ease of doing business, particularly in the areas of starting a business, getting credit, and protecting minority investors.
5. **Challenges:** While "Make in India" has received significant attention for its potential benefits, some studies have also highlighted the challenges associated with the initiative. For example, a study by Rohit Varman and AjitKarnik identified challenges such as infrastructure constraints, lack of skilled labor, and bureaucratic hurdles.

### **Research Gap:**

"Make in India" is an initiative launched by the Indian government in 2014 with the aim of promoting domestic manufacturing and attracting foreign investment. Several research studies have been conducted to analyze the impact of this initiative on various sectors of the economy. However, there are still some research gaps that need to be addressed.

Research gap is the analysis of the impact of "Make in India" on the competitiveness of Indian manufacturers in global markets. While the initiative aims to make India a hub for manufacturing and exports, there is a need to evaluate whether Indian manufacturers are able to compete with their global counterparts in terms of quality, cost, and innovation.

Furthermore, research is needed to analyze the impact of "Make in India" on the environment. The initiative has led to an increase in industrial activities, which could have adverse effects on the environment. There is a need to evaluate the extent to which the initiative has contributed to environmental degradation and identify measures to mitigate these effects.

Lastly, there is a research gap in analyzing the effectiveness of the various policy measures adopted under the "Make in India" initiative. While the government has introduced several

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policy measures to promote manufacturing and investment, there is a need to evaluate their effectiveness and identify areas for improvement.

### **Objectives of the study:**

1. To review the progress and impact of 'Make in India'.
2. To study the status of 'Make in India' post pandemic and in the year 2021-22
3. To find the contribution of 'Make in India' in financial inclusion and cashless economy.
4. To Find how 'Make in India' contributed for the development of India

### **Research Methodology:**

The methodology for researching the impact of "Make in India" would involve defining research questions, conducting a literature review, collecting data, analyzing data, and drawing conclusions. The methodology should be rigorous and reliable to ensure the accuracy of the study's findings.

### **MAKE IN INDIA STATISTICS:**

Here are some key statistics related to the Make in India initiative:

1. Between April 2000 and December 2021, the total FDI (Foreign Direct Investment) inflow into India was \$725.24 billion, out of which the manufacturing sector received \$122.52 billion.
2. As per the Department for Promotion of Industry and Internal Trade (DPIIT), the initiative has facilitated the implementation of 134,166 projects worth \$701 billion, creating employment opportunities for more than 12.5 million people.
3. The manufacturing sector's contribution to India's GDP (Gross Domestic Product) was 16.87% in 2020-21.
4. India's rank in the World Bank's Ease of Doing Business Index improved from 142 in 2014 to 63 in 2019, reflecting the government's efforts to improve the business environment in the country.
5. In 2019-20, India exported goods worth \$323 billion, with the top sectors being engineering goods, chemicals, and gems and jewellery. The government aims to increase exports to \$1 trillion by 2025.



### ‘Make in India’ Post Pandemic

The COVID-19 pandemic has had a significant impact on the global economy, including India's manufacturing sector. However, the Make in India initiative is expected to play a critical role in the country's post-pandemic economic recovery.

Here are some ways in which the Make in India initiative can contribute to India's economic recovery post-pandemic:

1. **Attracting foreign investment:** The pandemic has led to a shift in global supply chains, with many companies looking to diversify their production bases. India's Make in India initiative, which aims to create a favorable business environment and attract foreign investment, can help the country capitalize on this opportunity.
2. **Boosting domestic manufacturing:** The pandemic highlighted India's dependence on imports for critical goods such as medical equipment and pharmaceuticals. The Make in India initiative can help boost domestic manufacturing, reduce import dependence, and promote self-reliance.
3. **Creating employment opportunities:** The pandemic has led to job losses and increased unemployment in many sectors. The Make in India initiative can help create employment opportunities in the manufacturing sector, which has the potential to create a significant number of jobs.
4. **Improving infrastructure:** The Make in India initiative includes measures to improve infrastructure, including roads, ports, and power supply. Improved infrastructure can help attract investment and promote manufacturing.
5. **Promoting exports:** The pandemic has led to a decline in global trade, but the Make in India initiative can help promote exports and increase India's share in the global market.

In summary, the Make in India initiative can play a crucial role in India's post-pandemic economic recovery by attracting foreign investment, boosting domestic manufacturing, creating employment opportunities, improving infrastructure, and promoting exports.

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### **Here are some recent statistics related to the ‘Make in India’ initiative in 2021:**

1. According to the Department for Promotion of Industry and Internal Trade (DPIIT), the total FDI inflow in India during the period April to September 2021 was USD 35.33 billion, out of which the manufacturing sector received USD 8.71 billion.
2. The manufacturing sector grew at a rate of 6.9% in Q2 of FY 2021-22, according to the Central Statistics Office (CSO).
3. As part of the Production Linked Incentive (PLI) scheme, the Indian government approved incentives worth INR 26,500 crore (\$3.5 billion) for the automobile sector, INR 10,683 crore (\$1.4 billion) for the textiles sector, and INR 15,000 crore (\$2 billion) for the pharmaceutical sector.
4. The Indian government launched the National Single Window System to simplify regulatory processes for businesses, including obtaining licenses and approvals.
5. The United Nations Conference on Trade and Development (UNCTAD) ranked India among the top 10 recipients of FDI in 2020, with a total FDI inflow of \$64 billion.

### **‘Make in India’ data 2022**

As of now, there is limited data available on the Make in India initiative for the year 2022, as it is still ongoing. However, here are some recent statistics and developments related to the initiative:

1. According to the Department for Promotion of Industry and Internal Trade (DPIIT), the total FDI inflow in India during April to December 2021 was \$49.97 billion, out of which the manufacturing sector received \$11.98 billion.
2. The Indian government has announced a Production Linked Incentive (PLI) scheme for various sectors, including automobiles, pharmaceuticals, and textiles, to boost domestic manufacturing and exports.
3. Several global companies, including Apple and Samsung, have announced plans to expand their manufacturing operations in India.
4. According to a report by the Confederation of Indian Industry (CII), the manufacturing sector's contribution to India's GDP is expected to increase to 25% by 2025.

5. The Indian government has taken several measures to improve the ease of doing business, including simplifying the regulatory framework and introducing online platforms for various approvals and clearances.

Overall, these developments indicate that the Make in India initiative is still ongoing and remains a key priority for the Indian government. The government is taking various measures to promote domestic manufacturing, attract foreign investment, and improve the business environment in the country.

### ‘Make in India’ and financial inclusion

The "Make in India" initiative and financial inclusion are two separate initiatives launched by the Indian government, but they are interconnected. Here are some ways in which "Make in India" has contributed to financial inclusion in India:

1. **Job creation:** "Make in India" has led to an increase in job creation in the manufacturing sector, which has contributed to reducing poverty and improving financial inclusion. When people have a regular source of income, they are more likely to participate in financial activities such as savings, investments, and credit.
2. **Access to finance:** The initiative has also contributed to improving access to finance for small and medium-sized enterprises (SMEs) in the manufacturing sector. The government has launched several initiatives such as the Pradhan Mantri Mudra Yojana and the Stand-Up India scheme to provide loans to SMEs.
3. **Development of micro-enterprises:** "Make in India" has also led to the development of micro-enterprises in the manufacturing sector. The government has launched the Udyog Aadhaar scheme to provide a unique identity to micro, small, and medium enterprises (MSMEs) to help them access credit and other government schemes.
4. **Digital payments:** The initiative has also contributed to the promotion of digital payments in India. The government has launched several initiatives such as the BHIM app and the Unified Payments Interface (UPI) to promote digital payments and reduce the use of cash.

### **‘Make in India’ and cashless economy**

The "Make in India" initiative and the promotion of a cashless economy are two separate initiatives launched by the Indian government. However, there are some ways in which "Make in India" has contributed to the promotion of a cashless economy in India:

1. **Digital infrastructure:** "Make in India" has contributed to the development of digital infrastructure in India. Government launched several initiatives such as the Digital India campaign to promote the use of digital technologies in various sectors of the economy.
2. **Manufacturing of digital devices:** The initiative has also led to an increase in the manufacturing of digital devices such as smart phones, point-of-sale (POS) machines, and biometric scanners, which are essential for promoting a cashless economy.
3. **Payment solutions:** The initiative has also led to the development of payment solutions such as mobile wallets and payment gateways, which have made it easier for people to make digital payments.
4. **Promotion of startups:** "Make in India" has also promoted the development of startups in the fin-tech sector, which has led to the creation of innovative payment solutions.
5. **Government initiatives:** The government has launched several initiatives such as the BHIM app and the Unified Payments Interface (UPI) to promote digital payments and reduce the use of cash.

### **Make in India and its contribution to developing infrastructure.**

The Make in India initiative has a strong focus on developing infrastructure in the country, which is crucial for supporting domestic manufacturing and attracting foreign investment. One of the objectives of the Make in India initiative is to promote infrastructure development in the country. The initiative aims to enhance infrastructure in various sectors, including transportation, power, telecommunications, and urban infrastructure.

1. **Investment in infrastructure:** The Indian government has announced several schemes and initiatives to increase investment in infrastructure development, including the BharatmalaPariyojana, Sagarmala, and AMRUT schemes.

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2. **Promoting private sector participation:** Make in India encourages private sector participation in infrastructure development projects through public-private partnerships (PPPs) and other models. This has helped to mobilize private sector investment in infrastructure, which can help address the funding gap for infrastructure development in the country.
3. **Boosting manufacturing of infrastructure-related products:** Make in India has also promoted the manufacturing of infrastructure-related products such as construction equipment, electrical machinery, and telecom equipment. This can help reduce import dependence and enhance the competitiveness of domestic manufacturers in these sectors.
4. **Smart city development:** Make in India includes the development of smart cities in the country, which aim to provide better infrastructure and services to citizens through the use of technology and data. The Smart Cities Mission is one such initiative that aims to develop 100 smart cities across the country.
5. **Innovation and technology:** Make in India promotes the development and adoption of innovative technologies in infrastructure development, such as the use
6. **Industrial corridors:** The initiative includes plans to develop several industrial corridors in the country, such as the Delhi-Mumbai Industrial Corridor (DMIC), Chennai-Bengaluru Industrial Corridor (CBIC), and Amritsar-Kolkata Industrial Corridor (AKIC). These corridors aim to provide world-class infrastructure, including road, rail, and air connectivity, power, and water supply, to support manufacturing and industrial activities.
7. **Ports and airports:** The initiative includes plans to develop new ports and airports and upgrade existing ones to improve connectivity and facilitate trade and commerce.
8. **Digital infrastructure:** The initiative aims to improve digital infrastructure in the country, including high-speed broadband connectivity, to support e-commerce and digital services.
9. **Energy infrastructure:** The initiative includes plans to increase the share of renewable energy in the country's energy mix and develop a robust energy infrastructure to support manufacturing and industrial activities.

10. **Logistics infrastructure:** The initiative aims to improve the logistics infrastructure in the country, including transportation and warehousing facilities, to reduce logistics costs and improve the efficiency of supply chains.

### **Findings on make in India and its contribution for development of India:**

The "Make in India" initiative was launched by the Indian government in 2014 to promote domestic manufacturing and attract foreign investment.

1. **Increase in FDI:** "Make in India" has led to an increase in foreign direct investment (FDI) in India. According to a report by the Department for Promotion of Industry and Internal Trade (DPIIT), FDI inflows in India increased from \$36 billion in 2013-14 to \$74 billion in 2019-20.
1. **Employment generation:** The initiative has contributed to the creation of jobs in the manufacturing sector. According to a report by the National Sample Survey Office (NSSO), the number of people employed in the manufacturing sector increased from 51.2 million in 2013-14 to 52.3 million in 2017-18.
2. **Export growth:** "Make in India" has led to increase in exports of manufactured goods. According to the Ministry of Commerce and Industry, India's exports of manufactured goods increased from \$174.5 billion in 2013-14 to \$294.6 billion in 2019-20.
3. **Ease of doing business:** The initiative has contributed to improving the ease of doing business in India. The World Bank's Ease of Doing Business report shows that India's ranking improved from 142 in 2014 to 63 in 2019.
4. **Infrastructure development:** "Make in India" has led to an increase in infrastructure development in India. For instance, the government has launched several initiatives such as the Smart Cities Mission, the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), and the Pradhan Mantri Awas Yojana (PMAY) to improve infrastructure in urban areas.

### Limitations of 'Make in India'

While the Make in India initiative has been successful in attracting foreign investment and promoting domestic manufacturing, it also has certain limitations. The key limitations of the initiative are:

1. **Infrastructure bottlenecks:** India's infrastructure, including transportation, power, and telecommunications, still requires significant improvement. The lack of adequate infrastructure can make it difficult for manufacturers to operate efficiently and deliver goods on time.
2. **Labor laws:** The complex labor laws in India can make it difficult for companies to hire and manage employees, leading to increased compliance costs.
3. **Skill shortage:** Despite having a large workforce, India faces a shortage of skilled labor, particularly in high-tech manufacturing.
4. **Regulatory challenges:** Despite efforts to simplify the regulatory framework, India's regulatory environment can still be challenging for companies to navigate, with multiple agencies and regulations governing various sectors.
5. **Limited access to finance:** Small and medium-sized enterprises (SMEs) in India face difficulties in accessing finance, which can limit their ability to invest in new technology and expand their operations.
6. **Slow implementation of reforms:** While the Indian government has implemented several reforms to improve the ease of doing business, the implementation of these reforms can be slow, leading to delays and uncertainty for businesses.

### Conclusion:

In conclusion, the "Make in India" initiative has contributed to the development of India by attracting foreign investment, creating jobs, promoting exports, improving the ease of doing business, and developing infrastructure. However, there is still scope for further improvement in areas such as environmental sustainability and technology development. These statistics indicate that the Make in India initiative remains a key priority for the Indian government and is showing

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Progress in attracting foreign investment and promoting domestic manufacturing, overall the Make in India initiative is contributing significantly to the development of infrastructure in the country, which is crucial for supporting domestic manufacturing and attracting foreign investment. However, addressing infrastructure bottlenecks and accelerating the pace of infrastructure development will be crucial for sustainable development.

### **References:**

1. [www.makeinindia.com](http://www.makeinindia.com)
2. [www.planningcommission.gov.in](http://www.planningcommission.gov.in)
3. [www.makeinIndia.ndtv.com](http://www.makeinIndia.ndtv.com)
4. [www.forbesindia.com](http://www.forbesindia.com)
5. Economic Times (e-paper)
6. Business Standard (e-paper)
7. Times of India (e-paper)
8. Live Mint (e-paper)
9. The Hindu Business Line (e-paper)



### A COMPREHENSIVE STUDY ON INVESTORS PERCEPTION TOWARDS INVESTMENT IN MUTUAL FUND PORTFOLIO

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#### **ABSTRACT:**

Mutual funds offer a platform for regular investors to engage in the Indian capital market with professional fund management, regardless of the amount invested. The assets under administration of different fund companies have increased as a result of the fast growth of the Indian mutual fund business. For risk-averse investors, investing in funds is a safer alternative to investing directly in equities since it carries less risk. With low exposure to equities, Monthly Income Plan funds invest primarily in debt-oriented products and offer monthly returns. However, it has been noted that the majority of investors are unaware of the advantages of investing in mutual funds.

This may be inferred from the study that was conducted. Any mutual fund's performance as an investing element is heavily influenced by its capacity to successfully meet investor expectations. The goal of the current study is to gauge investor expectations and preferences. Also, it makes an effort to determine the aspects that individual investors consider when investing in mutual funds as well as their level of knowledge about doing so. This research aims to pinpoint the numerous elements influencing how investors see investing in mutual funds through questionnaire circulated among various investors who invested in mutual funds. The findings will help to understand the areas that need development in order to raise investor knowledge of mutual fund investments.

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**Keywords:** Mutual funds, Investors, Performance, Investment behavior, Risk, Return.

### **INTRODUCTION:**

A mutual fund is essentially made up of the money that many different persons (or investors) have pooled together. A qualified fund manager oversees the management of this fund. It is a trust that amasses funds from numerous participants who have similar financial goals. After that, it invests the funds in securities such as stocks, bonds, money market instruments, and/or other investments. Each investor is the owner of units, which are a fraction of the fund's holdings. After deducting certain costs, the income or profits from this collective investment are dispersed equally among the investors by determining a scheme's "Net Asset Value. Put a mutual fund is one of the most practical investment solutions for the average person as it provides the chance to invest in a diversified, expertly managed basket of securities at a reasonably cheap cost.

The performance of the securities that the mutual fund invests in determines the value of the fund. Investors purchase the performance of a mutual fund's portfolio—or, more specifically, a portion of the value of the portfolio—when they purchase a unit or share of the fund. Purchasing shares of a mutual fund is distinct from purchasing stock. Mutual fund shares do not grant their owners any voting rights, in contrast to stock. A mutual fund share is an investment in a variety of stocks or other securities. Investors in mutual funds benefit from diversification because the typical mutual fund includes a variety of securities.

Gains and losses are based on the success of the company as all their money is tied to it. But a mutual fund might own Google because the gains and losses of just one stock are balanced out by the gains and losses of other businesses held by the fund. Most private investors who want to buy shares do not want to participate in risky and speculative sale and purchase transactions. The vast majority of small investors need professionally recommended investments that should produce tax savings and the highest return feasible.

The MFs offer the capability to individual and small investors. The investors can choose which fund to invest in based on their track record. A team of professionals from the mutual typically evaluates market conditions and chooses the investments that their Fund will make. The MFs might invest in the equity of a few new businesses with high growth potential or already successful ones.

### **1. REVIEW OF LITERATURE:**

The researcher sought to understand how different demographic parameters affected investors' attitudes toward mutual funds. Chi-square test was used to measure a variety of phenomena, analyze the data collected efficiently and fluently, and rank the most important variables for determining whether or not to invest in mutual funds. Based on their prior experiences and perceptions of any event or thing, people might develop prejudices. Such bias and perception do not exclude an investment. An appropriate example is the propensity of investors to make investments based on perceived performance rather than real performance.

Similar to this, some people avoided participating in mutual funds until they had extra money since they saw them as a secondary investment option additionally, there is a discrepancy between perceived and actual performance since investors could base their choices on perceived rather than actual success. The first hypothesis is based on the idea that the investor's perception is a key element affecting investment in mutual fund schemes.

In order to assess the direction that mutual funds are taking among investors and to pinpoint the variables that affect the choice to participate in mutual funds, undertook his study. According to the report, income and open-ended schemes are favored above closed-ended and growth schemes, with open-ended schemes being the most popular among other things.

When investing in mutual funds, investor services, principal protection, and news publications are all top priorities. According to, Mutual fund investors behave irrationally by obsessing on previous success and refusing to record losses with stop losses when the fund is headed in the wrong direction. High prior performance is also given a lot of weight when evaluating an investment. In his research states that the most essential thing is to raise knowledge of the distinctive qualities of mutual funds, with liquidity and potential return being regarded the most significant investing considerations, followed by flexibility in the schemes, operational transparency, and valuations. Asset management companies should invest according to market trends so that their funds can gain popularity and offer good returns.

To determine the performance of the fund managers, a benchmark index is required. Larger asset bases are better performers when it comes to the asset base of the AMC.

The most crucial factor in picking a fund is the fund manager, and domestic mutual funds outperform overseas mutual funds in terms of performance.

In their research proposes that investors should take into account statistical factors such as systematic and unsystematic risk in the investment through alpha, beta, and standard deviations in addition to NAV and returns. Market authorities are keeping a close eye on mutual fund schemes in light of market volatility and the custodian's financial soundness. However, it should only be a matter of striking a balance and not allowing restrictions to raise product risks. Through his research states that Mutual funds began to penetrate rural regions, moving away from their traditional focus of urban areas, which is made feasible by new techniques. This was accomplished through new awareness initiatives. In this instance, the role of intermediaries is crucial to integrating rural investors into this financial instrument.

### **1. RESEARCH METHODOLOGY:**

#### **1.1 STATEMENT OF PROBLEM:**

Mutual funds are considered to be institutional entities that include the collectively intended and/or conceptually aggregated financial goals of the investment community. The fund manager makes investments with the money that is raised from several sources. Depending on their properly stated objectives, they may invest in various forms of assets. Therefore, in its most basic sense, a mutual fund is a collection of stocks and/or bonds in which each share that a shareholder owns reflects a portion of the fund's holdings. The revenue generated by these investors and the capital growth seen by the schemes are appropriately shared in a fair manner. But it should be noted that the proportional distribution of the unit holders is determined by how many of them there are. The best investing choice for the average person is consequently a mutual fund since it gives them the chance to invest in a competitively priced, professionally managed portfolio that is diversified.

#### **1.1 OBJECTIVES OF THE STUDY:**

- To understand preference of investors towards mutual fund schemes in the portfolio.
- To analyze the factors considered by investors before investing in mutual funds.
- To analyze the factors that prevents them from investing in mutual funds.
- To understand the satisfaction level of investors investing in mutual funds.

### 1.2 RESEARCH DESIGN:

The current study has employed both primary and secondary data. Through the published papers and publications, reports are where secondary data are gathered from. The information about investor's behavior in the mutual fund market was gathered through interviews and pre-structured questionnaires. The individual mutual fund investors were given a pre-structured questionnaire. The investors were chosen based on individuals who had previously invested in mutual funds and had some understanding of the fundamentals used in mutual fund industry. Prior to investing in any mutual fund, an effort has been made to understand how investors see mutual fund investments and to pinpoint the variables that they consider the most.

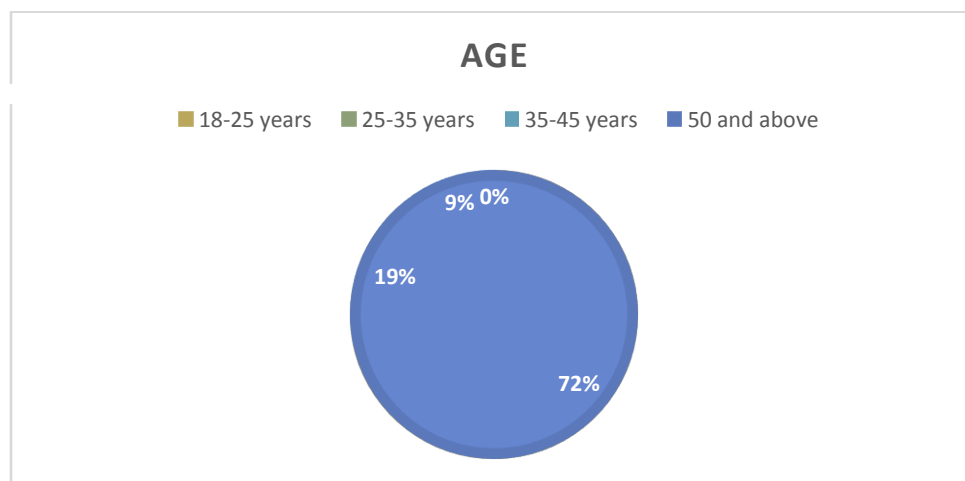
### 1.3 LIMITATIONS

- The research has a relatively small sample size.
- The study has not been carried out over a long period of time taking into account both market ups and downs, therefore the sample size may not reflect the whole market.
- Investors' purchasing habits and preferences are greatly influenced by the situation of the market. Such instances are not covered by the research.

## 2. DATA ANALYSIS:

**4.1** The demographic data collected through questionnaires are presented below using pie charts and bar graphs:

### a. Age group of investors:

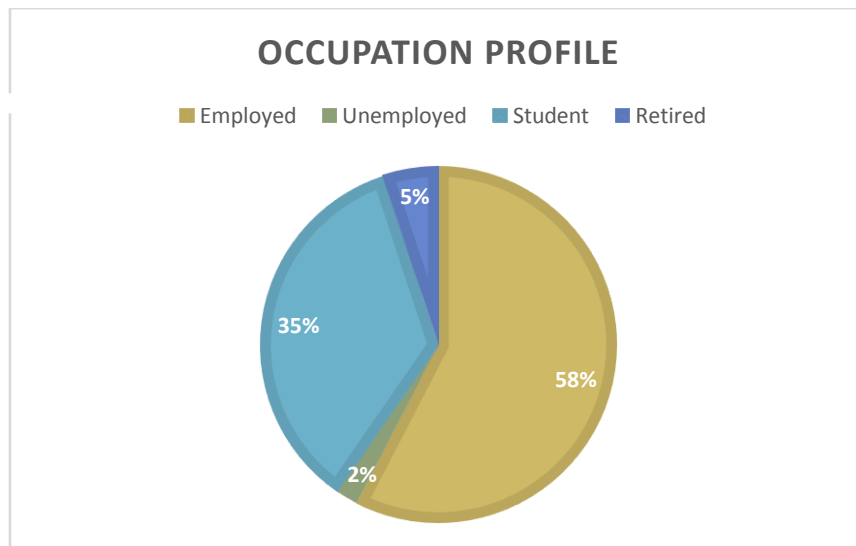


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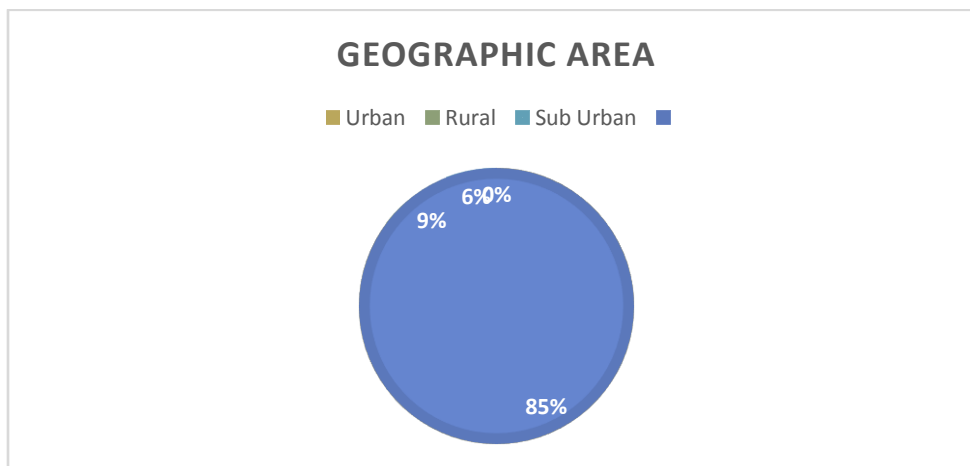
From the above chart we can see that most of the investors belong to the age group of 18-25 years followed by those who belong to age group of 25-35 years.

### b. Occupation profile of investors:



Most of the investors belong to the employed category either in public or private sector followed by students.

### c. Geographic location of the investors:

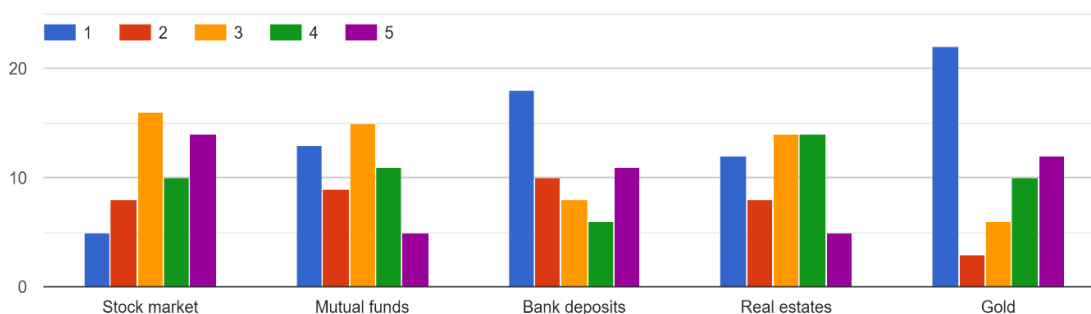


Based on the above chart, we can conclude that people who stay in Urban India are more aware of mutual funds schemes as compared to people staying in Rural and Sub Urban India.

**4.2** The data collected through the questionnaire is analyzed considering each factor and the analysis is presented below:

**a. Mutual Fund schemes preference of the investor**

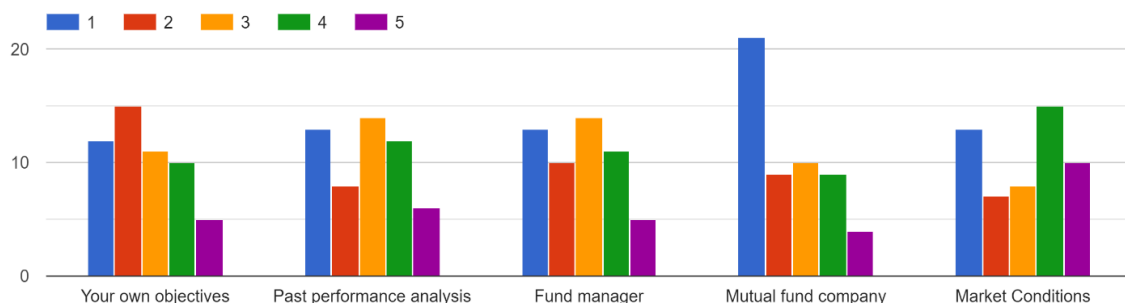
Which of the following investment options is the safest? Please rank it on the scale of 1 to 5 (1 being the most safest and 5 being the most risky)



Most of the investors find Gold investment as the safest investment option followed by bank deposits and mutual funds. While respondents find Stock market as the riskiest investment. Though most of the respondents belong to 18-25 age groups which is supposed to be risk takers. Yet most of them feel Gold as a safe investment option which shows that they are still not much aware of investing in Mutual funds.

**b. Factors considered by investors while investing in mutual funds:**

Which of the following requirements do you take into account when choosing a mutual fund? (Please give them a ranking from 1 to 5, with 1 the most required and 5 not so required)

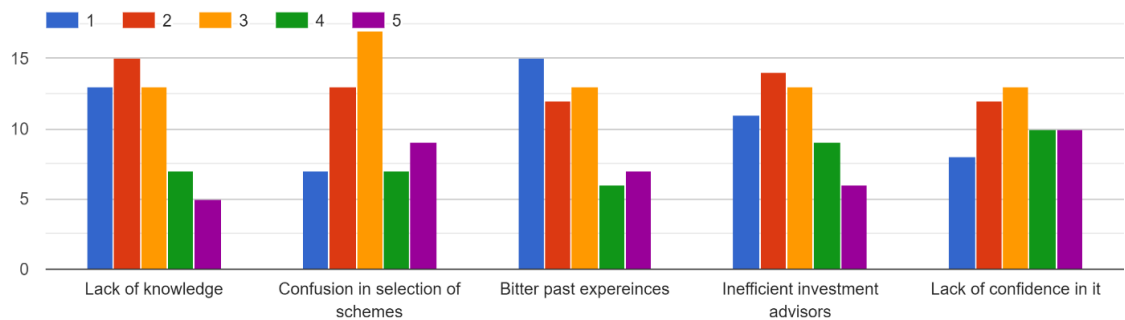


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Majority of investors considers the company that is offering mutual funds schemes followed by their own objective these objectives can be long term or short term in nature, which affects the preference of investments. Also the past performance analysis is also taken into consideration by them which shows that they are aware of the tool and techniques of such analysis or know how professionals can help them with this..

### c. Factors that prevent them from investing in mutual funds:

Which factors prevents you to invest in mutual fund? Please rank it on the scale of 1 to 5 (1 being the factor that prevents you the most and 5 being the factor that doesn't prevents you)



The above graphical representation can bring us to the conclusion that confusion while selecting the mutual fund schemes are one of the major factor that prevents them from investing them in mutual funds, this confusion may arise due to lack of awareness or too many similar schemes that offers similar returns and bear somewhat the same risk. This is followed by the lack of knowledge, which needs to be considered critically.

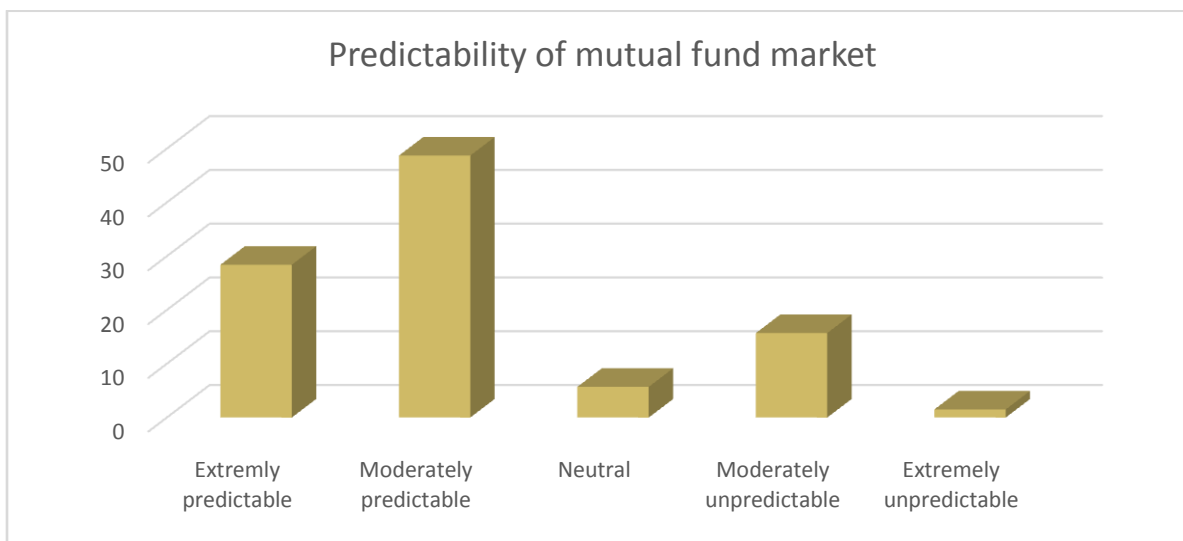
### d. Satisfaction level of investors:





The above table shows that only 25.9% respondents are strongly agreeing to the satisfaction level provided to them by their mutual fund company, while only 3.7 % disagree while majority that is 29.6% is neutral.

**e. Predictability of mutual fund market:**



f. We can conclude from the above chart that majority of respondents believe that mutual fund market is moderately predictable while the least number of people believe that its extremely unpredictable.

### 3. FINDINGS AND SUGGESTIONS:

As per the study conducted, the majorities of investors are between the ages of 18 -25, working in either the private or public sector, and are primarily from metropolitan areas of India. They prefer gold investments the most, followed by bank deposits and mutual funds.

We might infer from responses collected that just 25.9% of investors are satisfied by the performance of mutual funds. Confusion about which of the schemes offered by mutual fund companies to choose and the fact that there are still some people who are unaware of such schemes are a couple of the reasons why investors do not favor mutual funds.

The study also comes to the conclusion that investors' investment decisions are greatly influenced by the mutual fund business they are willing to invest in as well as their personal goals for making such an investment.

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According to the response, performance of mutual fund companies forms the third factor that motivates people to invest in mutual funds. Also, about 45% of investors think that the markets for mutual funds are reasonably predictable, while very few think that they are not excessively unpredictable. This indicates that the investors who have made investments have done adequate market research before doing so.

### CONCLUSION:

According to AMFI's most recent data, less than 1.5% of Indians participate in mutual funds. The mutual fund sector has 2 corers unique PANs, which indicates that it has 2 corer investors, out of the total 134 corer individuals in the country. In India, there are about 29 corer PAN card holders. This demonstrates that the majorities of individuals still either aren't aware of investing in mutual funds or prefer alternative types of investments and few other reasons stated earlier. This substantiates the necessity for Mutual Fund companies to work towards raising investor knowledge of their programmes. They will be able to touch additional markets and broaden their reach if they know which segment of investors they should focus on.

### REFERENCES:

- Bharti, K. A. (2015). Literature review and proposed coceptual framework. *Internrnational journal of Market Research*.
- Duggumpudi, R. A. (2010). An evaluation of equity diversified mutual funds: The case of the Indian market. . *Investment Management and Financial Innovations*, 66-73. .
- Goel, A. &. (2017). A study on investors' awareness and preference towards mutual funds as an investment option. *International Journal of Commerce and Management*, 61-65.
- Kaur, S. B. (2013). Investor's perception towards selection of mutual funds rather than stock market. . *International Research Journal of Business and Management*, 53-63.
- Kumar, S. K. (2014). Influence of risk perception of investors on investment decisions: An empirical analysis. . *Journal of Finance and Bank Management*, 15-25.
- Muthukrishnan, S. K. (2016). Demographic conditions influencing the investors' perception towards mutual fund investment in Virudhunagar district, Tamil Nadu. .

*International Journal of Advance Research and Innovative Ideas in Education*, 3789-3794.

- Rajasekar, D. D. (2013). A Study on Investor's Preference Towards Mutual funds with Reference to Reliance Private Limited. Chennai- An Empirical Analysis. . *International Research Journal of Business and Mangement*, 38-44.
- Singh. (2019). An empirical study of performance evaluation of selected. *International journal of scientific research*, Volume 3 (7).

### WEBSITES:

- <http://www.mutualfundindia.com>
- <http://www.amfiindia.com>
- <http://www.nseindia.com>
- <http://www.bseindia.com>
- <http://navindia.com>
- <http://www.valueresearchonline.com>
- <http://.www.icraonline.com>
- <http://www.sebi.gov.in>

### KAUTILYA'S CONTRIBUTION TO WELFARE AND RESOURCE MANAGEMENT DURING MAHABHARAT

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#### **INTRODUCTION:**

One of the greatest figures of wisdom and knowledge in the Indian history is Chanakya. He is estimated to have lived from 350 - 283 B.C. Chanakya is touted as the "Pioneer Economist of India". Chanakya was the adviser and Prime Minister of Emperor Chandragupta. Chanakya was a professor at the University of Takshila (located in present day Pakistan) and was an expert in commerce, warfare, economics, etc. His famous works include Chanakya Neeti, Arthashastra and Neetishastra. Read this biography of Kautilya that covers his interesting life history.

Chanakya is also known by the name of Kautilya and Vishnugupta as is mentioned in his text. His famous work called Arthashastra is a classic example of statecraft and politics and is read in Europe even today. It basically consists of the principles of politics and how the state works. An able ruler has to be a ruthless leader to make sure that the state works smoothly and efficiently. The legends associated with Chanakya are very interesting and provide a testimony of his greatness.

Good governance in Kautilya's literature is aimed at fulfilling the welfare of the people. "In the happiness of the King's subjects lies his happiness, in their welfare, his welfare. Whatever pleases him personally, he shall not consider as good, but whatever makes his subjects happy, he shall consider good." The jargon related to Human Resource Management was not prevalent then, but its essence was widely practiced in Kautilya's times. "The King should look to the bodily comforts of his servants by providing such emoluments as can infuse in them the spirit of enthusiasm to work. He should not violate the course of righteousness and wealth.

Thus, he shall not only maintain his servants, but also increase their subsistence and wages in consideration of their learning and work."

Kautilya said that good governance and stability go hand in hand. According to him, there is stability if rulers are responsive, responsible, accountable, removable, and recallable, otherwise there would be instability.

### **KAUTILYA'S CONTRIBUTION TO WELFARE AND RESOURCE MANAGEMENT:**

Kautilya provides a systematic treatment of management of human resources as early as 4th century B.C. in his treatise titled "Artha-Shastra". As it has been described in the book, there prevailed logical procedures and principles in respect of labor organizations such as Shreni or guild system and co-operative sector.

1. The wages were paid strictly in terms of quantity and quality of work turned out and punishment were imposed for unnecessarily delaying the work or spoiling it. The Government used to take active interest in the operation of both public and private sector enterprises and provided well-enunciated procedures to regulate employer-employee relationship.
2. Kautilya provides an excellent discussion on staffing and personnel management embracing job descriptions, qualifications for jobs, selection procedure, executive development, incentive systems (Sarasasaama- daana- bheda- danda- catura or Carrot and Stick approach) and performance evaluation.
3. We find several indications of prevalence of guild system involving performance of work at the residence of the entrepreneurs themselves. In course of time, the guild system was followed by cooperative sector consisting of craftsmen and traders, and purporting to promote their professional interests.
4. Numerous professional societies were formed on these lines with their own systematic procedures and policies to nurture their own interests. Again, there are several indications regarding the operation of principles of the division of labor. The concept of "Varnashram" or caste system was originally based on these principles.
5. The individuals who used to earn their livelihood by engaging themselves in activities such as teaching, sacrifice or state management were designated as Brahmins while those specializing in fighting were termed as Kshatriyas.

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6. Moreover, individuals engaged in the areas of trade, business and agriculture were called Vaishyas and those devoting themselves in manual work were known as Shudras.
7. Later on, these professions emerged to be hereditary which facilitated the transfer of skills and training from one generation to another. Numerous professions based on such specialised transfer of skills became hereditary including Goldsmiths, Weavers, Potters, Blacksmiths, Carpenters, Hunters, Charioteers, Snake charmers, Architects, Sculptors, Armourers and turned out to be separate communities by themselves.
8. Kautilya stated that investment in human capital especially in higher education would have a greater impact on the growth and development of the economy.

### **CONCLUSIONS:**

- From the 14th century B.C. to the latter half of the 10th century A.D., the relationships between the employer and employees were marked by justice and equity.
- Majority of the artisans and the craftsmen were extremely poor and lived on starvation level. Therefore, it was not startling that the productivity of workers was very low. Presumably, low wages, climate conditions and poor physique were the major factors responsible for it.
- During early British rules, there prevailed a laissez-faire policy towards the business. As it is evidenced in the report of the Indigo Commission, the working conditions were appalling, living conditions were sub-human and several abuses prevailed in indigo plantations.
- During Mughal rules, the Indian trade and commerce is revised.
- Even the Plantation Act of 1863 makes provisions that if the workers failed to complete their period of contract, they should be imprisoned for a period not exceeding 3 months.
- According to the Factory Act of 1881, the workers employed in the factories were allowed a week-off and provisions were also made for inspection as well as limiting hours of work for women workers to eleven per day.
- In 1890, the first labour organization designated as Bombay Mill Hands Association was established. Subsequently.

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- In 1905, the printer's union at Calcutta and in 1907, the Postal Union at Bombay were established. In 1981 the Madras Labour Union
- In 1922, the Indentured Labour System and Central Labour Board and All Trade Union Congress, In 1926 the Indian Trade Union Act (a landmark in history of industrial relations), During Second World War, rapid growth in Trade Unionism
- Between 1939-40 and 1944-45 the no of registered trade unions increased from 666 to 865, after Second World War especially after the independence large scale of expansion of the trade union movement. During 1947-1960, employment rose by 2.8 time's.
- During 1960, 45 percent of the total industrial workforce was claimed to be unionized
- Explicitly, during post-independence period, the activities of Personnel Department in different public and private sectors have multiplied
- According to the provisions of section 49 of the Factories Act 1948, it become obligatory for the-employers to employ a Welfare Officer in a factory employing 500 or more workers.
- Section 58 of the Mines Act, 1952, empowers the Government to specify employment of welfare officer/officers. However, it does not mean that the functions of Personnel Department are entirely limited to welfare activities.
- Management of human resources is being regarded as a specialized profession such as that of medicine and law. In addition to the industrial relations functions (although sometimes the industrial relations forms a separate department), the Personnel Department is responsible for other varied functions including employment, safety, training, wage and salary administration and research and development.
- The Head of the Personnel Department is associated with top management and helps it in the formulation of personnel policies for the company.
- Indeed, the activities involved in Personnel Department are akin to those performed in this department in any other western countries.

### CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE: A REVIEW

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#### **ABSTRACT:**

A number of high-profile scandals and corporate failures in recent years have made the topic of corporate governance more and more significant. Companies are required to abide by a set of procedures, values, and guidelines known as corporate governance in order to maintain their long-term existence and profitability. This paper proposes a conceptual framework to comprehend the relationship between corporate governance and financial performance by drawing a review of the existing literature and conceptual models that support the connection between the two. The study uses a sample of 30 published research papers extracted from various journals and reports for a period of 10 years, i.e., from 2012 to 2022. This paper also seeks to examine different theories that support the relationship and the idea of corporate governance and highlights how crucial it is to a company's effective financial performance. It explores various corporate governance mechanisms including the board of directors, board size etc. And their effect on financial performance overall, the paper offers insights into the role that corporate governance plays in enhancing company's financial performance. The paper concludes with a discussion of the practical implications of the findings and highlights the relevant topics for further research in this subject.

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**Keywords:** Corporate governance, financial performance, board of directors, agency theory, stakeholder theory.



### **INTRODUCTION:**

#### **CORPORATE GOVERNANCE**

There have been numerous controversies in the past that has lowered investor's confidence and shook Indian markets. These frauds have exposed a number of weaknesses in the systems which are taken advantage of to commit unethical practices. There have been many corporate frauds and scams that have shaken trust and faith of many stakeholders. The world has realized the importance of good corporate governance practices which is vital for an organization's long-term viability and success. Corporate governance is a set of systems or processes which are required to ensure that a company operates in the best interest of its stakeholders. The definition given by Cadbury committee is the most widely used one, which defined corporate governance as "the system by which companies are directed and controlled.

Principles of corporate governance, "accountability, transparency, fairness, independence" ensure that an organization meets its commitment towards its stakeholders, brings goodwill towards the organization, helps an organization gains investor's confidence, ensures that an organization does not involve in any unethical practice.

In general, good corporate governance is crucial for risk management, encouraging moral behavior, protecting the interests of stakeholders, increasing transparency, complying with the legal framework and assisting in the production of long-term value for all the stakeholders. The board is in charge of overseeing the organization, setting management policies, protecting the interests of shareholders, and making decisions on crucial matters.

According to Organization for economic cooperation and development (OECD), "Corporate governance involves a set of relationships between a company's management, its board, its shareholders, and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. In an organization, boards of directors are responsible for the governance.

According to CII's (Confederation of Indian Industry) "Desirable Corporate Governance: A Code", "Corporate governance deals with laws, procedures, practices and implicit rules that determine a company's ability to take managerial decisions vis-a-vis its claimants, in particular, its shareholders, creditors, customers, the State and employees."

From all the above definitions, it can be said that irrespective of the type of the organization, improved governance structures and processes lead to sound decision-making, increased accountability, promote efficient succession planning for senior management and increase the long-term prosperity of businesses.

In India, SEBI has played an important role in establishing norms and standards for corporate governance in India such as listing requirements, standards for board of directors, independent directors, related party transactions, standards for financial and non – financial disclosures, etc. Clause 49 of the listing agreement was also implemented by SEBI to improve corporate governance practices in India. This clause is applicable on listed companies and focuses on rights of the shareholders, role of stakeholders, disclosure and transparency, responsibilities of board, etc. The CII also has played a significant role in developing the corporate governance practices in India. As mentioned earlier, their report “Desirable Corporate Governance: A Code” has highlighted various top corporate governance practices. Reports by various other committees such as Naresh Chandra Committee report (2002), Narayana Murthy Committee report, etc. have also contributed majorly on the code of corporate governance. The companies act, 2013 has also made significant contributions towards strengthening of corporate governance in India by mandating standard for board structure, outlining the duties and responsibilities of directors, etc.

### **2.2 SIGNIFICANCE OF CORPORATE GOVERNANCE**

The significance of corporate governance lies in its ability to ensure that a company is running in an ethical, responsible, and sustainable manner that maximizes long-term shareholder value and maintaining the interests of other stakeholders such as employees, customers, suppliers, and the wider society simultaneously.

Effective corporate governance structures ensure that there is transparency in the decision-making processes of a company and that the company is held accountable for its actions.

Good corporate governance promotes ethical and responsible behavior by setting out clear standards of conduct and ensuring that these are adhered to by all members of the organization.

Strong corporate governance frameworks help companies to identify and mitigate risks and to ensure compliance with laws, regulations, and industry standards. Companies with strong corporate governance structures are more likely to perform well and create long-term value for their shareholders and other stakeholders. Effective corporate governance helps to build trust and

Maintain the reputation of a company, which is critical for attracting and retaining customers, investors, and employees. Overall, corporate governance plays a vital role in ensuring the long-term sustainability and success of a company by promoting ethical behavior, reducing risk, and enhancing transparency and accountability.

### **2.3. FINANCIAL PERFORMANCE**

There are various definitions mentioned in the literature regarding financial performance. Performance of an organization can be measured in terms of its ability to meet its goals within a specified time limit. Performance can also be understood as the ability of the company to generate profitability by employing various resources in the most efficient manner. There are certain ways in which performance of an organization can be measured. The existing literature has used both market- based measures and accounting based measures. These measures are used by stakeholders like investors, etc. to help them take decisions regarding their investment by measuring a company's past and present performance. Usually, for understanding the financial performance of a company, accounting based measures are widely used as they are considered more reliable as firms have to follow certain principles while recording their financial statements in order to have accuracy and meet the standards. Some of the accounting- based measures include Return on assets (ROA), Return on equity (ROE), Return on capital employed (ROCE), etc. that were mostly used in the past studies.

### **1. STATEMENT OF THE PROBLEM**

Corporate governance has been recognized as an important aspect that leads to the overall success and long - term survival of the organization. Many authors have found positive impact of corporate governance on financial performance of companies, but on the other hand, many also have contrasting views on the same. The existing literature regarding this relationship is huge but the overall results are mixed and inconclusive. There is still lack of clarity on the exact nature of this relationship. This brings out the need to review the existing literature and to find various theoretical perspectives and trends in it. Identification of research gap can also contribute towards further scope for research in this area. This paper aims to understand the aforementioned view by understanding the concept and significance of corporate governance and the relationship between corporate governance and financial performance by providing a review of the existing literature, with an objective of identifying the factors with regard to this relationship.

### **OBJECTIVES:**

- To understand the concept and significance of corporate governance
- To understand the relationship between corporate governance and financial performance by drawing a review of the existing literature.

### **METHODOLOGY:**

The paper involves a review of the existing literature to understand the concept and significance of corporate governance and the relationship between corporate governance and financial performance. The study uses published research papers extracted from various journals and reports for a period of 10 years, i.e., from 2012 to 2022.

### **LITERATURE REVIEW:**

The author in her study employed a sample of 20 companies listed the S&P CNX Nifty 50 Index to examine the impact of corporate governance on corporate financial performance in an Indian context and used secondary data collected over a two-year period, from FY 2010-11 to FY 2011-12. The findings showed that business financial performance is positively and significantly impacted by governance ratings.

Also, it was discovered that a firm's ratings, together with employee-related and environmental factors, had a considerable impact on the financial performance of the organization.

In their study identified impact of few corporate governance factors on financial performance of the company. The study's corporate governance variables included age, the percentage of promoter ownership, the number of independent directors with respect to non-independent directors, and the number of directors sitting on numerous boards.

Two independent variables, ROA and ROCE, were used to gauge the financial performance of businesses. The data used for the study is from the companies that are part of the BSE SENSEX for a period of four years.

The findings showed that corporate governance factors had a considerable impact on a company's performance, and all of these factors were able to predict and explain for about half of the variation in both performance measurements. Significant relationships between some corporate governance variables, such as the percentage of promoter holding, age, and the number of independent directors, and both financial performance indicators, were also discovered.

They used the annual reports of the top 5 Indian listed companies, which represent the IT firms (TCS, Infosys, Wipro, HCL Technologies, and Tech Mahindra), on the basis of their net worth as of February 2016, to examine the extent to which corporate governance through the board performance impacts the financial performance of selected IT companies in India for a year, 2014 to 2015. The findings showed a considerable positive relationship between the financial performance of particular IT companies and board governance.

Both the board committee and the board's composition have demonstrated positive correlations with ROA and ROCE, but the board committee has also demonstrated a significant impact on these two metrics. Study results also emphasized on role of the board and having the right board size. In their study examined the impact of corporate governance disclosure practices on the corporate performance by taking the top most company from every sector when arranged according to their Market capitalization.

The results of the study revealed that the impact of voluntary governance disclosure practices is positive and significant on the overall performance of the selected sectors and the non-voluntary governance disclosures are also gearing up showing a positive impact on the performance of corporate.

### **Theoretical background -**

Corporate governance can be analyzed and understood using these theories -

1. Agency theory: Agency theory was examined by Jensen and W.H. Meckling in their paper "Theory of the Firms" in 1976. In this theory, principals (shareholders of the company) give the task of running of the company to the agent (directors or managers). According to this theory, there might be conflicts of interest between shareholders and management, which could lead to agency costs that affect a company's financial performance. In other words, the theory states that there is a principal – agent problem in an organization where the interest of the principals (shareholders) and agents (managers) may not align with each other. There can be conflict of interest as in where management may give priority to their own interest first over the interests of the shareholders.
2. Stakeholder theory: Stakeholder theory states that an organization is responsible to take care of the interests of all the stakeholders such as employees, customers, community, suppliers, etc. This idea highlights how crucial it is to take into account the interests of all

Parties involved, not just shareholders. Building trust and solidifying connections with stakeholders through the use of effective corporate governance mechanisms.

3. Like stakeholder engagement and transparency can ultimately boost financial performance. It will also help the organization to build strong relationships with them and gain their loyalty along with an improved brand reputation and revenue. Explained that in order to improve relationships between stakeholders and the company, a few aspects should be prioritized, such as organizational fairness, perceived opportunities costs, affiliation, etc.
4. Resource dependence theory: According to this theory, corporations depend on outside resources like capital and information to accomplish their objectives. Corporate governance can help an organization to have access to these resources which can ultimately help them to improve their financial performance. A robust board of directors and other effective corporate governance structures can aid in attracting and keeping these resources, which can enhance a company's financial performance.

Explained that to a certain extent, authority procedures and organizational structures can be clarified using the resource dependency theory, which can aid in resource protection and environmental protection.

### **CONCEPTUAL FRAMEWORK:**

There are certain elements in this framework. Starting with the various governance mechanisms that company can adopt to ensure that they follow good corporate governance practices.

There are various mechanisms such as board structure, board independence, executive compensation, disclosures, etc. Another element is the financial performance that can be measured through ROA, ROE, ROCE, etc.

Financial performance can be impacted by the governance mechanisms used. Third element is the element mediating these two aforementioned elements. This element includes the nature of the company, age, the industry it belongs to, its ownership structure, various regulations it is exposed to, the expectations of its stakeholder, etc.

These three elements combined together in a framework can be used to know the relationship between corporate governance and financial performance.

### CONCLUSION:

The available literature on the relationship between corporate governance and financial performance has shown varied results proving to have positive or inverse relation with financial performance. However, corporate governance is known to have great importance with regard to financial performance globally. In some studies, only one out of various mechanisms such as board size, board independence, etc. of corporate governance is used, while in some a combination of few or a corporate governance index is used to understand the relationship. The governance mechanisms differ across different industries on the basis of size, age or nature of the industry. Thus, each governance mechanism will have different impact on various financial performance measures in different industries. The existing literature is not vast enough to cater all the relevant existing industries. Also, for measuring the performance, some studies have used market- based measures while some have used accounting- based measures.

Other theories such as resource dependency theory, stakeholder theory, etc. are not used frequently and many have examined this relationship based on no specific theory at all. The topic of corporate governance itself is highly complex as no two businesses or markets are exactly alike because of which it is difficult to have single best governance structure. This makes the subject of corporate governance eligible for further research.

In conclusion, the relationship between corporate governance and financial performance is a sheer topic of research. The dynamic and ever challenging business environment can't be summarised in literatures.

*Governance is a continuous process that requires continuous evaluation.*

In a nutshell, more and continuous research is required to comprehend this link and to pinpoint the best governance approaches that can influence financial performance at that particular situation/ time.

### REFERENCES

- Aggarwal, P. (2013). Impact of Corporate Governance on Corporate Financial Performance. *IOSR Journal of Business and Management* 13(3):01-05. Retrieved from IOSR Journal of Business and Management (IOSR-JBM).

---

## Growing Infrastructure A key to Transforming Indian Economy

---

- Al Homaidi, E. A., Almaqtari, F. A., & Ahmad, A. (2019). Impact of Corporate Governance Mechanisms on Financial Performance of Hotel Companies: Empirical Evidence from India. *African Journal of Hospitality, Tourism and Leisure, Volume 8 (2)*.
- Arora, A., & Sharma, C. (2016). Corporate Governance and Firm Performance in Developing Countries: Evidence from India. *Corporate Governance International Journal of Business in Society 16(2)*.
- Bansal, D., & Singh, S. (2021). Does board structure impact a firm's financial performance? Evidence from the Indian software sector. *American Journal of Business, ISSN: 1935-5181*.
- Barney, J. B., Ketchen, D. J., & Wright, M. (2011). The Future of Resource-Based Theory. *Journal of Management 37(5):1299-1315*.
- Bijalwan, J. G., & Madan, D. P. (2013). Board Composition, Ownership Structure and Firm Performance. *Research Journal of Economics and Business Studies, 86-101*.
- Cadbury. (1992). *The financial aspects of corporate governance and Gee And Co. Ltd.*
- CII. (1998). *Desirable corporate governance: A code.*
- Durgavanshi, S. S. (2014). *Impact of Corporate Governance Practices on financial performance of Microfinance Institutions in India.*
- G., P. (2017). Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry. *European Journal of Management and Business Economics Vol. 26 No. 1 pp. 67-85*.
- Goel, A., & Sharma, R. (2020). Effect of Board Size on Firm's Performance: Evidences from India. *International Journal of Applied Business and Economic Research 15(22):139-151*.
- Iminyi, J., & Otuya, D. W. (2020). CORPORATE GOVERNANCE, FIRM PERFORMANCE AND FIRM VALUE OF FIRMS LISTED IN NAIROBI STOCK EXCHANGE: A REVIEW OF EXISTING EMPIRICAL EVIDENCE.



*International Journal of Management and Commerce Innovations ISSN 2348-7585 Vol. 7, Issue 2, pp: (1398-1407),.*

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm' Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (1976) 305-360.
- Kataria, W., & Deep, D. V. (2018). CONCEPTUAL FRAMEWORK OF BOARD DIVERSITY AND ITS RELATIONSHIP WITH CORPORATE GOVERNANCE. *JETIR August 2018, Volume 5, Issue 8.*
- Kaura, P., Dharwal, M., Kaur, H., & Kaur, P. (2019). Impact of Corporate Governance on Financial Performance of Information Technology Companies. *International Journal of Recent Technology and Engineering (IJRTE).*
- Kudal, P., & Dawar, S. (2020). The Impact of Board Composition on Firm Performance with Reference to Selected Indian Companies. *International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878 (Online), Volume-8 Issue-6.*
- Kumar, S., & Prusty, T. (2017). Empirical Evidence of Corporate Governance Disclosure and Board Size Modular with Financial Performance in select IT Companies in India. *Management Insight - The Journal of Incisive Analysers* 13(01).
- Mandal, P., & Al-ahdal, W. M. (2018). Impact of Corporate Governance on Financial Performance of Indian Electronic Consumer Goods Firms. *International Journal of Research* 5(19):56-74. Retrieved from International Journal of Research 5(19):56-74.
- Mishra, S., & Mohanty, P. (2014). Corporate Governance as a Value Driver for Firm Performance: Evidence from India. *Corporate Governance International Journal of Business in Society* 14(5).
- Mohan, G. M., & Marimuthu. (2015). A STUDY ON THE IMPACT OF CORPORATE GOVERNANCE ON FINANCIAL PERFORMANCE . *ICTACT JOURNAL ON MANAGEMENT STUDIES, VOLUME: 01, ISSUE: 01.*

- Mutyala, S., & B, S. (2019). Impact Of Corporate Governance Disclosure Practices On Financial Performance Of Selected Sectors . *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH VOLUME 8, ISSUE 11*.
- Namazi, M. (2013). Role of the agency theory in implementing management's control. *Journal of Accounting and Taxation 5(2):38-47*.
- Nienhueser, W. (2008 ). Resource Dependence Theory – How Well Does It Explain Behavior of Organizations? *management revue 19(1+2):9-32*.
- OECD. (2004). *OECD Principles of Corporate Governance*.
- Prusty, T., & Kumar, S. (2016). Effectivity of Corporate Governance on Financial Performance of IT Companies in India with Special Reference to Corporate Board. *Amity Journal of Corporate Governance*.
- Shrivastav, S. M., & Kalsie, D. A. (2015). A REVIEW ON CORPORATE GOVERNANCE IN INDIA: IMPACT ON FIRM PERFORMANCE. *International Journal of Business and Administration Research Review, Vol. 1 Issue.11, July - Sep*.
- Singh, A., & Singh, A. (2021). *Impact of Corporate Governance on Financial Performance- A study on SENSEX constituent Companies*.
- Varshney, P., Kaul, V. K., & Vasal, V. (2012). Corporate Governance Index and Firm Performance: Empirical evidence from India. *Available at SSRN 2103462*.

**A STUDY ON-ONLINE TRANSACTION AND ITS PERSPECTIVE  
TOWARDS SMALL BUSINESS ENTITIES**

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**ABSTRACT:**

Online Transaction Services is an information system that enables and handles transaction oriented applications, usually for processing transactions for financial transforming and retrieval. The perspective of small business entity had proliferated information based on age of science, computer and network technology, the e-commerce has become a routine procedure of customers because it is convenient. Business transactions continue to shift from cash based transactions to electronic-based transactions.

Quite possibly of the most significant and lethal issue which lessens their confidence in computerized installments. Fixing changes, powerful framework, and speedy attitude of misrepresentation cases with severe punishments alongside client and vendor mindfulness can assist with improvement by building the confidence among small business entities.

The Descriptive study has explored the influences trust during online transaction. The major data will be ascertained through the secondary sources which highlights the perspective of small business.

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**Keywords:** *Online transaction, Small Business Entities, Perspective towards online transaction of SBE*

### **Introduction:**

The Internet and digitalization are fundamentally changing the way people, businesses, and governments interact, including across borders. In this intensification information age, a remarkable change is observed in the global digital payments industry. These innovations are very simple-to-use, and cashless payment methods have attracted a considerable number of users. Users have made payments through mobile wallets, P2P mobile payments, real-time payments, and crypto currencies.

Cashless payments have been an excellent substitute for billions of people worldwide. The Covid-19 pandemic has led many to accept digital payments during the lockdown in 2020 that resulted in high volumes showing tremendous growth. A drastic change in payment habits appears to continue further in 2021 with solid growth.

The online consumer gives time, cognition and effort to the experience of interacting with the Web Site, and gets an experience enabled by the Web Site that hopefully makes it easy to find needed/wanted products, to checkout quickly and to receive confirmation about all important aspects of the purchase, such as order-confirmation and delivery-tracking. In this regard, the product quality, service quality, and Web Site quality are also intertwined with each other.

It helps in improving the value of goods and services and increasing the speed of service delivery by help of high speed computer networks. It helps very rapidly in the trading process via computer networks. Here in this paper we discuss about the online transaction concerned in searching and obtaining manuscript on the Internet.

If we go through a survey the collected data shows that both acquaintance through an Internet seller and its information shows that whereas knowledge certainly makes confidence, it is principally people's character to belief that artificial their faith in the merchant procedure and expectation in the retailer prejudiced the respondents' purpose to find out about books.

### **II. Prospective of online transaction for small business**

Online transaction processing (OLTP) is information systems that facilitate and manage transaction-oriented applications, typically for data entry and retrieval transaction processing. Online transaction is done with the help of the internet. It cannot take a place without a proper -

internet connection. Online transactions occur when a process of buying and selling takes place through the internet. When a consumer purchases a product or a service online, he/she pays for it through online transaction.

Online transactions systems can conveniently and affordably connect entrepreneurs with banks, employees, suppliers, and new markets for their goods and services. These systems can accelerate business registration and payments for business licenses and permits by reducing travel time and expenses.

Digital financial services can also improve access to savings accounts and loans. Electronic wage payments to workers can increase security and reduce the time and cost of paying employees. Yet, there are challenges as many entrepreneurs and employees lack bank accounts, digital devices, and reliable technology infrastructure growing.

A huge part of any small business's lifecycle. Choosing a payment gateway for your small business is the same as picking up the grow-with-me pants for the child. In an attempt at simplicity, some payment systems may risk becoming barebones solutions that could struggle if your small business scales.

There are a range of online payment methods for small business that allow clients to pay their invoices online, in the way that's most convenient for them. Accepting a range of payment methods, including online payments, can help small businesses attract new clients and receive payment faster from existing customers.

### **III. Issues of online transaction in small business entities.**

Hundreds of millions of people around the world have an online identity that has personal and potentially sensitive information that serves as a well of opportunities for cyber-criminals and hackers, who may take advantage of shared data for their activities.

This may range from issues such as reporting false names and information to authorities, to impersonating and invading bank accounts. Identity theft, especially in the digital age, can strike anyone.

Due to the ease of access to the internet and other sources that can be manipulated or corrupted by cyber-criminals, it has become one of the biggest vulnerabilities of the average consumer.

And it may hit people of all ages, especially young children as they don't apply for credit cards and aren't old enough to monitor their own information.

### **STATEMENT OF THE PROBLEM:**

Many of the online transaction modes are not popular among the common people and people are not comfortable to use them for their day-today's transactions.

There is less awareness among the people about different types of online transaction methods for small business entities.

Therefore, the pivotal issue is related to know the perspective of small business entities towards the online transaction.

The major concerned of business entities is lethal issues of financial transaction. There is also a myth among them that overspending is possible when we use the online transactions nodes and banks deduct high transaction cost for the digital payment operations. Hence literacy about the online transaction has become a necessity.

### **OBJECTIVES:**

- To study about online transaction and its significance with reference to small business entities.
- To understand the perspective of online transaction with reference to small business entities.

### **METHODOLOGY:**

A Descriptive study has undertaken to study about online transaction and its perspective towards small business entities. The source of data s is mainly through secondary data.

The materials were collected from books, journals, newspapers and relevant websites which have been consulted in order to make the study an effective one.

Statistical data analysis of online transaction

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### Statistical data analysis of online transaction:

Table IX.1: Payment System Indicators – Annual Turnover (April-March)						
Item		Volume (Lakh)			Value (Rs. Crore)	
2018-19	2019-20	2020-21		2018-19	2019-20	2020-21
1	2	3	4	5	6	7
A. Settlement Systems						
CCIL Operated Systems	36	36	28	11,65,51,038	13,41,50,192	16,19,43,141
B. Payment Systems						
1. Large Value Credit Transfers – RTGS	1,366	1,507	1,592	13,56,88,187	13,11,56,475	10,55,99,849
Retail Segment						
2. Credit Transfers	1,18,481	2,06,506	3,17,852	2,60,90,471	2,85,62,857	3,35,22,150
2.1 AePS (Fund Transfers)	11	10	11	501	469	623
2.2 APBS	14,949	16,766	14,373	86,226	99,179	1,12,747
2.3 ECS Cr	54	18	0	13,235	5,145	0
2.4 IMPS	17,529	25,792	32,783	15,90,257	23,37,541	29,41,500
2.5 NACH Cr	8,834	11,290	16,450	7,29,673	10,43,212	12,32,714
2.6 NEFT	23,189	27,445	30,928	2,27,93,608	2,29,45,580	2,51,30,910
2.7 UPI	53,915	1,25,186	2,23,307	8,76,971	21,31,730	41,03,658
3. Debit Transfers and Direct Debits	4,914	7,525	10,456	5,24,556	7,19,708	8,72,552
3.1 BHIM Aadhaar Pay	68	91	161	815	1,303	2,580
3.2 ECS Dr	9	1	0	1,260	39	0
3.3 NACH Dr	4,830	7,340	9,630	5,22,461	7,18,166	8,68,906
3.4 NETC (Linked to Bank Account)	6	93	650	20	200	913
4. Card Payments	61,769	72,384	57,841	11,96,888	14,34,814	12,93,822
4.1 Credit Cards	17,626	21,773	17,641	6,03,413	7,30,895	6,30,414
4.2 Debit Cards	44,143	50,611	40,200	5,93,475	7,03,920	6,62,667
5. Prepaid Payment Instruments	46,072	53,318	49,392	2,13,323	2,15,558	1,97,695
6. Paper-based Instruments	11,238	10,414	6,704	82,46,065	78,24,822	56,27,189
Total – Retail Payments (2+3+4+5+6)	2,42,473	3,50,147	4,42,229	3,62,71,303	3,87,57,759	4,15,12,514
Total Payments (1+2+3+4+5+6)	2,43,839	3,51,654	4,43,821	17,19,59,490	16,99,14,234	1471,12,363
Total Digital Payments (1+2+3+4+5)	2,32,602	3,41,240	4,37,118	16,37,13,425	16,20,89,413	14,14,85,173

Note:

1. RTGS system includes customer and inter-bank transactions only.
  
2. Settlements of CBLO, government securities and forex transactions are through the Clearing Corporation of India Ltd. (CCIL). Government Securities include outright trades and both legs of repo transactions and tri party repo transactions. With effect from November 5, 2018, CCIL discontinued CBLO and operational zed trip arty repo under securities segment.
  
3. The figures for cards are for payment transactions at point of sale (PoS) terminals and online.
  
4. Figures in the columns might not add up to the total due to rounding off of numbers. Source: RBI.

### **Summing Up:**

The online transaction has grown year by year with margin of 20%. It is showing the perspective of small business entities towards the online transaction. It is effective in terms of economic benefits and making business entity more easily accessible in online transactions.

After introducing online transactions systems in the market, cash transactions have reduced gradually. In such cases, small businesses need to start adopting the latest technologies to prevent the risk of being overtaken by competitors. Having a robust electronic payment, you can easily make payments that help lower the transaction costs associated with your business and can also be a time-saver. Advanced security and faster payment processing are the other additional benefits of using electronic payment systems.

SMEs increasingly recognize the importance of adopting Alternative online technologies to reduce the administrative burden on their business. An electronic payment is a necessary part of that story. Most SMEs are in different places in the online journey.

Some still use paper-based payment processes, while others may make payments electronically, but are using sub-optimal processes that leave value on the table. Businesses are recognizing that paper based payments and manual processes increase their administrative costs, cause inconvenience to their customers and suppliers, and they risk losing essential records.



### Findings:

- The small business Enterprises prospective towards online transaction had grown to large extent.
- The small business Enterprises having a month of losing money due to using of online transaction
- Government as provided competitive platform for SBE's in terms of online business transaction to enhance the development economically.
- The quandary for SBE's is agitation of fraudsters or Black hat hackers in virtual domain in online transaction.

### Suggestions:

- Making use of professional software or services remains the safest prevention method.
- The Online transactions mechanism should be strengthen to support SMBE.
- The online transaction must boost the confidence of SBE's by providing digital literacy.
- The online transactions portal must fortify all it's accessibility for SBE's.
- The government as to take indiscipline able and obligatory action towards noxious issues.

### Conclusion:

This research helps to understand online transactions and it's prospective towards SBE's. The main intention behind the online transaction towards SBE's is to provide the ascendancy. Most of the SBE's are incognizant of electronic transaction and its magnitude and the major problem faced by them are unlettered and the mechanism of online transaction. It is fruitful for all the SBE'S is to understand the online transaction obtained assistance.

### Reference:

- The Future of the Mobile Payment as Electronic Payment System – ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.8, No.8, 2016.
- Online Optimal Control with Linear Dynamics and Predictions- Advances in Neural Information Processing Systems 32 (Neur IPS 2019).

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- Intention to Online Transaction: Empirical Study on Go-Med Applications – (2020) ISBN: 978-989-758-452-7
- An Overview of Online Transaction Technologies in E-Commerce- 2017 IJEDR | Volume 5, Issue 2 | ISSN: 2321-9939.
- The research of Online Transaction Risk in Service Provider to Consumer - National Conference on Information Technology and Computer Science (CITCS 2012).

**Impact of Digitization of Banking Services by Commercial Banks with Reference to Bangalore**

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**Introduction:**

The Present Banking services offered by commercial banks have undergone transformation compare to the past. One such factor helped the banks to provide varied banking services to varied group of customers globally are technology.

Emerging banking technology made banks to innovate and help to cater different banking needs. Innovation in bank resulted digitization, which include ATM, Internet banking, Telephone Banking, Mobile Banking and online banking.

The Platform of digitization made banks to emerge core baking technology where banks are interconnected and customers are served better and faster.

**Statement of the Problem:**

According to available statistics, hitherto, China and India are ranked first and second respectively in the global league table for highest number of Internet users. Also the use of mobile platforms for accessing internet has been amazing, in China, 65 percent of mobile-phone users regularly access the Internet via their phones, while in India, mobile-only web browsers are expected to comprise 55 percent of the total Internet user base by 2015.

As an outcome, the customers have declined with respect to use of the traditional delivery channels for accessing banking services than in earlier years. Similarly, the use of digital channel for accessing banking services also showed significant increase.

More and more customers embracing the mobile and net banking many financial startups are providing individual services for everything from loans to wealth management Advisors for credit checks etc. Some of the popular providers include Paypal, Paytm etc. Many fin-techs have started budding everywhere. These companies go out of way to help and ease the customer's life for their needs. The present study helps to understand the level of customer services and satisfaction through digitization by commercial banks.

### **Review of Literature:**

1. Bhide (1997)<sup>1</sup>, in his study "Information Technology in banks". Revealed that customer expectation was changing. So, banks were under pressure what kind of service to be provided in the future. Therefore, information technology plays a very important role in satisfying the future needs of the customers. He stated that the ATM, PC banking, internet banking, electronic delivery channel, MICR and bank net have cut down cost and increased the productivity of the banks. He concluded that service institutions like banks had to evolve the implement strategies in fulfilment of their mission.
2. **Gaganjot Singh (1998)**<sup>2</sup>in his study opined that the new private sector banks are providing better services to their customers by using advanced and customer friendly technology. These banks have emerged as a model to other banks in requisites of service levels, ambience, technology etc. As public-sector banks have already conventional huge customers, they have become conceited and are slow to become customer friendly. Public sector banks are also fewer inventive in employing technology. Since public sector banks have vast customer base, they feel that they can survive competitions from new age group banks.
3. **P Verma (2000)**<sup>3</sup>. In his study he found that new age banks are performing better than that of traditional public-sector banks. In his study he found that innovation and implementation of advanced technology is challenging threat to the public-sector commercial banks. The study also reveals that the banking business per employee is better in new age banks than that of traditional public-sector banks. The study concludes by a suggesting public sector banks have to increase the efficiency and productivity to compete with new age banks which employed advance technology.

### **RESEARCH GAP:**

The studies have been made on digitization of banking services such as ATM, CREDIT CARD, DEBIT CARD, MOBILE BANKS TELEPHONE BANK, online banking etc. which are unique. These studies helped to understand different strategies followed by commercial banks to cater needs of bank customers.

Since there is no specific study on made on digitization of banking services of commercial banks in Bangalore, Karnataka, to fill this gap this study entitled “Impact of Digitization of Banking Services by Commercial Banks with reference to Bangalore” has been undertaken.

### **SCOPE OF THE PRESENT STUDY:**

The present study aims at analyzing of digitization of banking services by public and private sector commercial banks in Bangalore.

### **OBJECTIVES OF THE STUDY:**

1. To study the digital banking services offered by commercial banks.
2. To analyses the impact of digitisation of bank son customer’s satisfaction.

### **HYPOTHESIS:**

- There is no significant relationship between selected independent variable and dependent variable digital services offered by commercial banks
- There is no significant difference between selected independent variable and dependent variable digital services offered by commercial banks

### **RESEARCH DESIGN:**

This is a descriptive study, involving investigation and adequate interpretation. Since it is fact finding study, the data has been collected through personal interview with the sample respondents.

Information so collected from respondents was documented with the help of structured interview schedules drafted for the purpose.

### **SOURCE OF DATA:**

Data required for the study was collected from primary as well as secondary source. Primary data collected from the respondents namely bank customers and secondary data was collected from websites of RBI and other financial dailies.

### **Sampling Plan:**

For the purpose of this study 100 bank customers are selected who are residing in the vicinity and its surrounding where researcher lives.

Purposive or judgment sampling and under the non-probability method was deployed. The 100 respondents consists customers of both Public and Private Sector commercial banks.

### **Data Collection Instruments:**

Structured interview schedule was drafted and administered to the respondents for collecting of primary data. Interview schedule featured closed questions.

### **Data Processing and Analysis of Plan**

Data is analyzed using Statistical tools like Percentage analysis, Correlation Analysis and ANOVA technique.

### **Limitation:**

The study focuses only digital services provided by the public and private sector banks in Bangalore. This study excludes Co-operative banks and foreign banks.

The findings of study confined only too few banks where customers operate bank accounts.

## **Data Analysis – Bank Customers**

**Table: 1 Showing use of digital banking by Respondents**

	<b>Respondents</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
Yes	56	56	56
No	44	44	100
Total	100	100	--

From the above table it is clear that majority 56% of the respondents for the study were use digital banking and 44% the respondents are denying use of digital banking. Hence it is inferred that banks should provide good quality of digital service to the existing customers and educate about digitization to the remaining customers who are not use digital service.

### **ANOVA ANALYSIS:**

The data collected from the Customer are analyzed using ANOVA analysis and it has shown in the following table.

### **LEVEL OF CUSTOMER SATISFACTION TOWARDS BANKING DIGITIZATION**

The level of satisfaction banking digitization services among the customers of selected private and public sector banks were analyzed by selecting the variables like ATM cum Debit card, Mobile Banking, E-Banking, credit card, customer care service for other problems.

There are five variables which influence and examine the level of customer satisfaction towards banking digitization which helps the customers to know their level of customer satisfaction towards banking digitization by the commercial banks. The responses were scored by Likert five- point scaling technique.

**EMPLOYMENT STATUS AND LEVEL OF CUSTOMER SATISFACTION TOWARDS BANKING DIGITIZATION:**

The distribution of sample respondents according to the employee status and level of customer satisfaction toward banking digitization variables like ATM cum Debit card, Mobile Banking, E-Banking, credit card, customer care service for other problems which helps to understand the level of customer satisfaction, wherein the employee and organizational productivity can be increased. In order to find out the relationship between occupation and level of customer satisfaction a hypothesis was framed and analyzed with the help of ANOVA test. The result of the ANOVA test is shown in the following table.

**Null Hypothesis:** There is no significant difference between the factors influencing the level of customer satisfaction with independent variable Employment Status

Table: 1.1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	.133 <sup>a</sup>	.018	.008	.66796	.018	1.759	1	98	.188	

a. Predictors: (Constant), Employment Status

Table: 1.2

**ANOVA**

Model		Sum of Squares	D.f	Mean Square	F	Sig.
1	Regression	.785	1	.785	1.759	.188
	Residual	43.725	98	.446		
	Total	44.510	99			

a. Dependent Variable: Level of customer satisfaction towards Banking Digitization

b. Predictors: (Constant), Employment Status



It is observed from the above analysis that there is no significant difference between the independent variable like Employment Status and dependent variable like level of customer satisfaction towards banking digitization. Therefore, all the predictor variables like ATM cum Debit card, Mobile Banking, E-Banking, credit card, customer care service for other problems which helps to understand the level of customer satisfaction with independent variable Employment Status. Here the level of customer satisfaction towards digitization banking services don't vary with the independent variable Employment Status, it means all the cadre of customer are highly satisfied with the banking digitization services. There is a strong association between the Employment status of the customers like government, private, professional, student, business and retired employees with level of customer satisfaction towards digitization of banking services. Therefore, the employment status of the banking customer is highly satisfied with the various digital banking services offered by the bank. Hence, the null hypothesis employment status and level of customer satisfaction towards banking digitization are accepted.

### **CORRELATION ANALYSIS:**

The data collected from the Customer are analyzed using correlation analysis and it has shown in the following table

### **IMPACT OF DIGITIZATION OF BANKING SERVICES**

The impact of digitization of banking services among the customers of selected private and public sector banks were analyzed by selecting the variables like ATM cum Debit card,

Credit Card facility, Electronic Clearing Scheme, Electronic Fund Transfer, Mobile Banking, E-Banking, Telebanking

There are seven variables which influence and examine the impact of digitization of banking services which helps the customers to understand the various digital services offered by the commercial banks. The responses were scored by Likert five point scaling technique.

Descriptive Statistics, Correlation Analysis among the Dependent and Independent Variables:

**GENDER AND IMPACT OF DIGITIZATION OF BANKING SERVICES**

The distribution of sample respondents according to the gender and impact of digitization of banking services are shown below. In order to find out the relationship between gender of respondents and impact of digitization of banking services a hypothesis was framed and analyzed with the help of Correlation analysis. The result of the correlation analysis is shown in the following table.

**Null Hypothesis:** There is no significant relationship between the independent variable gender and the impact of digitization of banking services.

Table: 1.3 Descriptive Statistics

	Mean	Std. Deviation	N
Gender	1.3400	.47610	100
Usage of Technological services	1.0700	.25643	100

Table: 1.4

**Correlation Analysis**

		Gender	Usage of Technological services
Gender	Pearson Correlation	1	.134
	Sig. (2-tailed)		.184
	N	100	100
Usage of Technological Services	Pearson Correlation	.134	1
	Sig. (2-tailed)	.184	
	N	100	100

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It is inferred from the above analysis that there is no significant relationship between the gender and impact of digitization of banking services offered to customers of commercial banks. Therefore, all the predictor variables like gender are not related with dependent variable impact of digitization of banking services which is considered to be useful for respondents of banking customers. Here when gender varies between male and female independent variable, those variables are not correlated various technological services offered by the commercial banks like ATM cum Debit card, Credit Card facility, Electronic Clearing Scheme, Electronic Fund Transfer, Mobile Banking, E-Banking, Tele banking. Therefore, the choosing of technological services offered by the commercial banks varied between male and female customers are highly supportive.

Hence the null hypothesis gender and impact of digitization of banking services are accepted

### EDUCATIONAL QUALIFICATION AND IMPACT OF DIGITIZATION OF BANKING SERVICES

The distribution of sample respondents according to the gender and impact of digitization of banking services are shown below. In order to find out the relationship between gender of respondents and impact of digitization of banking services a hypothesis was framed and analyzed with the help of Correlation analysis. The result of the correlation analysis is shown in the following table.

**Null Hypothesis:** There is no significant relationship between the independent variable gender and the impact of digitization of banking services.

Table: 1.5

#### Descriptive Statistics

	Mean	Std. Deviation	N
Educational Qual	2.9500	.72995	100
Usage of Technological Services	1.0700	.25643	100

Table: 1.6

**Correlation Analysis**

		Educational Qualification	Usage of Technological services
Educational Qual	Pearson Correlation	1	-.089
	Sig. (2-tailed)		.378
	N	100	100
Usage of Technological Services	Pearson Correlation	-.089	1
	Sig. (2-tailed)	.378	
	N	100	100

It is inferred from the above analysis that there is no significant relationship between the educational Qualification and impact of digitization of banking services offered to customers of commercial banks. Therefore, all the predictor variables like educational status is negatively correlated with dependent variable impact of digitization of banking services which is considered to be useful for respondents of banking customers. Here when educational status varies between diplomas, graduate, postgraduate, professional and schooling, these variables are negatively correlated with various technological services offered by the commercial banks. The selection of technological services like ATM cum Debit card, Credit Card facility, Electronic Clearing Scheme, Electronic Fund Transfer, Mobile Banking, E-Banking, Tele banking is not same across all the status of education qualification, it varies differently with different education qualification customers. Therefore, the choosing of technological services offered by the commercial banks varied between educational statuses customers which are highly supportive. Hence, the null hypothesis educational status and impact of digitization of banking services are rejected.

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

From the above analysis the following findings are made:

- It is observed from the above analysis that there is no significant difference between the independent variable like Employment Status and dependent variable like level of customer satisfaction towards banking digitization.
- It is inferred from the above analysis that there is no significant relationship between the gender and impact of digitization of banking services offered to customers of commercial banks.
- It is found from the above analysis that there is a significant relationship between the educational qualification and impact of digitization of banking services offered to customers of commercial banks.
- It is noticed that 56% of respondents use digital banking due its convenient, time saving, safe and secure and for better offers and discounts.
- It is noticed that 56% of respondents use digital banking due its convenient, time saving, safe and secure and for better offers and discounts.

### **Conclusion:**

It is concluded from above study that the banks are innovating technology to provide various banking services to their customers. Some tech savvy customers are happy and satisfied with competitive services offered by the banks. On the other hand digital deniers exist due to various reasons. Hence banks have to educate digital deniers and improve the overall service to these customers. This will help the banks to serve better and reduce the cost.

### **Recommendation of the Study**

- Though same banking services offered to the customers, some customers deny usage of digital banking services due to the following reasons, Not aware about it, Concerned about security, Difficult to access, Don't get time, No computer related knowledge, Not interested etc. Hence banks should educate such digital denier to start use of digital banking.

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- Digitalisation should be seen as an opportunity to boost growth and improve service rather than only as a way of cost saving.
- Banks should engage in collaborative activities with new market entrants to foster digitisation and stay competitive.
- Bank should create security to customer's data by using security software to prevent frauds and suspicious transactions.

### References:

1. Chawla A S & others, "Indian Banking Towards 21<sup>st</sup> century", Deep & Deep Publications, New Delhi.
2. Leadership in banking through technology, 22<sup>nd</sup> Annual Report and Account 2015-16 (ICICI Bank).
3. Shashi K Gupta et.al, (2017) Research methodology, 5th edition, New Delhi, Kalyani Publishers.
4. BhideM, "Information Technology in Banks", The Journal of Indian Institute of Bankers, October-December 1997, pp.149-152
5. **P Verma**, (2000). "Banking on a Change". ICFAI Reader, ICFAI University Press, Benjara Hills, Hyderabad, 69-72.

**A STUDY ON E-SERVICES TO CUSTOMERS WITH SPECIAL  
REFERENCE TO PAYMENT BANK AND SMALL BANK**

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**ABSTRACT:**

This research paper mainly focuses meaning of payment bank & small bank, history, number of payment bank and small bank working in India, key differences between small bank and payment bank, and various E-services given by payment banks and small banks to customers.

Both the small banks and the payments banks in India are regulated by the Reserve Bank of India, and the central bank of the nation oversees all of their policies and operations.

Small banks are a financial institution, it has established for provide financial services to the unbanked, underserved, and un-served sections of the nation. Payment banks operate on a smaller scale with no credit risk.

The Indian central bank came up with the idea for this new financial system. Both banks are providing various electronic services to their customers for satisfactions.

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**Keywords:** Payment Bank, Small Bank, History, Number of payment bank and service banks, digital services,

### **INSTRUCTION:**

The RBI and the Indian government have launched various programmes to encourage the financial activities of rural dwellers, low-income individuals, migrant workers, and small businesses. Many initiatives have been launched, such as the digital India Campaign, Pradhan Mantri Jan Dhan Yojna (PMJDY), launching of electronic fund transfer mechanisms such as RTGS and NEFT, and promoting mobile payment tools etc. The RBI and the Ministry of Central Government have established the concept of Payment Banks and Small Banks to promote financial inclusion in India, particularly in rural areas, with a focus on low-income individuals and small businesses. The Reserve Bank of India has set up the idea of Payment Banks to further the financial inclusion in India, especially in the backward areas and villages, mainly focusing on less-income groups and small businesses.

### **MEANING OF PAYMENT BANK:**

A payments bank functions similarly to other banks but on a smaller scale and without taking on any financial risk. In plain English, it can perform the majority of financial tasks but not advance loans or issue credit cards.

### **MEANING OF SMALL BANK**

Small Finance Banks are financial institutions that aim to fund the impoverished sectors' financial needs through basic banking activities.

### **HISTORY OF PAYMENT BANK AND SMALL BANK**

In September 2013, the RBI established the Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households, led by Nachiket Mor. On January 7th, 2014, the committee published its final report, which emphasized on the development of a new type of bank known as a payment bank. In July the same year, the RBI issued a draught of rules for payments banks, asking views from important stakeholders and the general public. The final guidelines were published on November 27, 2014. During the Budget presentation on February 28, 2015, it was announced that India Post will establish a payment bank using its extensive network. On August 19, 2015, the Reserve Bank of India granted eleven businesses. In-principle permission to establish payment banks, the "in-principle" license was valid for 18 months, during which time the businesses had to meet the conditions and were not permitted to engage in banking activities.



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After determining that the prerequisites have been met, the RBI will give full licences under Section 22 of the Banking Regulation Act of 1949.

A) Eligible entities to function as payment banks are:

- Non-banking prepaid instrument issuers
- Mobile telecom companies
- Non-Banking Finance Companies (NBFC)
- Corporate business correspondents
- Co-operatives and
- Supermarket chains

B) The following entities are eligible to operate as small banks:

- NBFCs
- Microfinance institutions
- Individuals with experience of banking
- Finance societies for ten years
- Local area banks

C) The minimum paid-up capital necessary in both payment and small banks is Rs. 100 cores.

### **LIST OF PAYMENT BANKS**

The following table will be given establish date and head office of the payment banks in India

<b>Name of payment bank</b>	<b>Year of established</b>	<b>Head office</b>
Airtel Payments Bank	11 April 2016 by Bharti Airtel	New Delhi
India Post Payments Bank (IPPB)	On 17 August 2016, it is operating with the <u>Department of Posts</u> .	New Delhi
<u>Paytm Payments Bank</u>	November 28, 2017.	<u>Noida, Uttar Pradesh</u>
<u>Jio Payments Bank</u>	<u>November 10, 2016 by Reliance Industries</u>	<u>Mumbai, Maharashtra</u>
Fino Payments Bank	2006	<u>Mumbai, Maharashtra</u>
<u>NSDL Payments Bank</u>	October, 2018	<u>Mumbai, Maharashtra</u>

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### LIST OF SMALL BANKS

Name of small bank	Year of established	Head office
North East Small Finance Bank Ltd	July 25, 2016	Assam
Ujjivan Small Finance Bank Ltd	February 1, 2017	Bangalore, Karnataka
Suryoday Small Finance Bank Ltd	January 23rd 2017	Navi Mumbai, Maharashtra
<u>Au Small Finance Bank Ltd.</u>	19 <sup>th</sup> April 2017	<b>Jaipur, Rajasthan</b>
<u>Capital Small Finance Bank Ltd</u>	April 24, 2016	Jalandhar, Panjab
<u>Fincare Small Finance Bank Ltd.</u>	May 2017	Bangalore, Karnataka
<u>Equitas Small Finance Bank Ltd</u>	5 September 2016	Anna Salai, Chennai
<u>ESAF Small Finance Bank Ltd.</u>	10th March 2017	Mannuthy, Thrissur
<u>Utkarsh Small Finance Bank Ltd.</u>	November 25, 2016	Varanasi, Uttar Pradesh
<u>Jana Small Finance Bank Ltd</u>	April 28, 2017.	Bangalore, Karnataka
<u>Shivalik Small Finance Bank Ltd</u>	January 01, 2021	Noida, Uttar Pradesh
<u>Unity Small Finance Bank Ltd</u>	November 1, 2021.	South West Delhi, Delhi

### KEY DIFFERENCE BETWEEN PAYMENT BANK AND SMALL BANK

<u>Small Finance Banks</u>	<u>Payments Bank</u>
<u>It can issue credit cards and loans</u>	<u>It can carry out most banking operations but can't advance loans or issue credit cards.</u>
<u>Time Deposit such as Fixed Deposit (FD) and Recurring Deposit (RD) are both accepted</u>	<u>These do not accept time deposits like FD and RD</u>
<u>There is no restriction in the area of operations of small finance banks</u>	<u>The payments bank cannot set up subsidiaries to undertake non-banking financial services activities</u>
<u>Customers are reached through the company's branches.</u>	<u>Customers are reached through Mobile banks</u>

### REVIEW OF LITERATURE

**Rajesh Kumar, Vagish Mishra and SomrajSaha (2019):** Digital Financial Services in India: An Analysis of Trends In Digital Payment in this paper we can understand digital payment

introduction and modes of digital payments such as RTGS (Real Time Gross Settlement (RTGS) in India), Retail Electronic Clearing in India, Retail Electronic Clearing in India, Mobile Banking in India, and infrastructure, and also explain financial opportunities in India etc. finally conclusion of the paper favorable regulatory environment, digital financial services (DFS) have seen unprecedented growth in the past few years.

With digital financial services (DFS) being popularized in the urban sphere their potential customer segments like migrants, village people, non-earning tech-savvy youth on which providers need to focus on. With different business models for digital financial services (DFS) different people are being served. India still is one of the financially excluded countries, and there is a sea of opportunity for every stakeholder and customer segment to use digital financial services to its optimum and avail the financial service.

**N. Saravanan, and Dr. R. Leelavathi (2020):** Impact Of E- Banking Services with Customer Attitude and Satisfaction with Special Reference to Chennai District, in this paper enhance knowledge on e-banking service quality, customers satisfaction, customer attitude etc., the main objective of paper are To Identify the Various Dimensions of Internet Banking Service Quality in Chennai District.

- To examine the Relationship Between the Customer Satisfaction and the Various Internet Banking Service Quality Dimensions in Chennai District.
- To study the Impact of the Internet Banking Service Quality Dimensions on the satisfaction of customers & Customer Attitude in Chennai District

The final conclusion of research papers is this research paper aims make an original contribution to the existing knowledge by investigating the impact of internet banking service quality on customer satisfaction and customer attitude in Chennai District. The capital city of Tamilnadu the various dimensions of the internet banking service quality that were taken into consideration while making the study were: Efficiency, System Availability, Fulfillments, Responsiveness, Privacy, Contact and website design.

### **OBJECTIVES OF STUDY:**

- a) To understand RBI key guidelines for small bank and payment bank
- b) To understand history of small banks and payment bank
- c) To know the products and services offered by the small bank and payment bank

### **RESEARCH METHODOLOGY:**

A study was carried out to discover the electronic services to customers by payment bank and small bank. Secondary data was used in the study. The information was gathered from journals, government and private agency reports, surveys, and websites.

### **SOURCE OF DATA COLLECTION:**

The data required for the study is collected from secondary data only.

### **PRIMARY DATA**

Questionnaire is main tool for collecting primary data. Questionnaire has been designed in a systematic manner covering adequate and relevant questions which covers all aspects of the study. It is the foremost extensively used methodology in varied economic and business surveys.

### **SECONDARY DATA**

The background of the present study was collected from various sources which include Books, journals, website and other related research work.

### **LIST OF DIGITAL SERVICES TO CUSTOMERS**

- a) You can Pay digitally at thousands of online and offline merchants using:
  - QR Code Scanning
  - Payment to a phone number
  - Transfer money to any bank account in India through IMPS or UP Merchant Initiated Payment
- b) You can also send money to parties.
- c) Apply for business loan
- d) You can recharge prepaid phones/DTH, pay utility bills
- e) You can book bus/train tickets, and do other things.
- f) You can Purchase third-party insurance products ex: Life insurance, health insurance.
- g) You can purchase of any personal accidental insurance polices
- h) Virtual debit card: We can use free virtual debit card to make online purchases across in India.
- i) Real time updated of customers account book
- j) Apply for personal loan
- k) Apply for business loan
- l) Apply For Vehicle Loan
- m) Mobile banking

Access small financial banking services at your fingertips with the Mobile Banking App. It enables you to complete your banking tasks securely in a matter of minutes. From checking your balance to adding a new beneficiary or transferring funds, we've got you covered. The Mobile Banking App puts the entire bank in the palm of your hand. You'll be surprised to learn that you can conduct various types of transactions in multiple languages using our Mobile Banking App.

### **Transaction Facilities**

- Set or change your debit card pin
- Opening of FD or RD online
- Manage Card – Block / unblock Card for POS, ECOM and ATM transactions and Manage limit respectively
- Pay your loan instalment
- Pay your loan instalment

#### n) Personal Net Banking services

Access your savings and deposits, transfer funds via IFT, IMPS, NEFT, and RTGS, track your transactions, and perform almost all other operations from the comfort of your own home.

o) Phone Banking: Phone Banking refers to the service that can be accessed over the phone and provides account and general information, fund transfer facilities, and any other banking services that the bank may offer over the phone.

#### p) Missed Call Banking

You can now receive free account updates by simply giving us a missed call from your registered mobile number.

### **STATEMENT OF THE PROBLEM:**

Earlier while traditional banking system was the only option, the customers directly had to go to the bank in person to conduct any banking transaction such as take demand draft, money transfer, bank statement, balance check, withdrawal, deposits etc.

Then emerged the concept of electronic banking which provides various services to the customer's satisfaction.

Electronic banking services include Internet banking, Automated Teller Machines, statement print, money deposit machine, Debit/Credit cards, balance check, E-cheque, smart cards, accounting optioning, RTGS, NEFT etc.

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These services help to manage and use one's bank account such as verifying balance of the accounts, transfer of money from one person to another. Now all banks trying to give more services for customer's satisfaction. In present situation electronic services are play very crucial role in customer's satisfaction. So that in this paper we can enhance payment banks and small banks are providing electronic services to customers.

### **SCOPE OF THE STUDY:**

The study helps in knowing how far the payment bank and small bank providing electronic services to customers. The study further extends and helps to develop an increasing association with the customer's satisfaction through electronic services and modern technology services. In 21 centuries, the customers demand the banking services for 24x7. In the modern age, the complete banking structure has been changed due to widespread internet and communication technology. Now, all the aspects of economy such as buying and selling, manufacturing, trade, import, export of goods are depending upon electronic banking services. Future research can be done in analyzing the comparative performance of E-banking services provided by payment bank and small bank. Study given details regarding payment banks and small banks to customers.

### **LIMITATION OF STUDY:**

After conducting many tedious exercises over the study and making inferences about the results. The findings and conclusive remarks are listed as under:

- a) E-services have listed based on website and journals.
- b) Study completely based on secondary data
- c) Study does not collect any option of customers.

### **SUGGESTIONS:**

Based on the findings, the focus of the study has been laid on more penetration of banking services for unbanked and underserved segment through use of electronic methods. Financial literacy or digital education is highly recommended to make people understand the advantages of banking institution through electronic mode. Security is deeply associated with digital transactions so effort should be laid to make people feel secure in using digital instruments. Perceived coordination of risk should be removed through public awareness programs. People who are illiterate and unable to operate internet-based devices even in English or any local language should be extended with Artificial Intelligence based facilities like voice command system to make digital transactions easy for them.

### **CONCLUSION:**

India, primarily being agrarian economy and three fourth of its population residing in rural part has always been distant apart from formal banking institutions. For the proportionate development and uplifting standard of living a proper and balanced circulation of finance is required, payment banks and small banks offering various electronic services to customers. Most of banks design website and electronic services only in English language this designs more help to who have more knowledge of English.

If banks design website and electronic services in local language, people can easily usage of services and also banks will give training regarding usages, safety and precaution while use of electronic services, it will increase customer satisfaction.

No-Frills accounts and its extension PMJDY proved a great success by opening 37.87 corer bank accounts within 6 years which is 16% of total bank accounts operative in UP. However, still more than 50% people are away from banks and this includes housewives, unemployed and low-income categories living in rural areas.

The boost the program of FI further, government tried to reach those who are still away from banking institutions by connecting them digitally where physical bank branches are still absent. Digital India program helped to escalate the efforts.

### **REFERENCE:**

1. Javed, A., & Ahmed, V. (2022). Digital Trade as Engine of Growth for Pakistan. *Pakistan Journal of Social Issues Volume XIII*, 71.
2. Saravanan, N., & Leelavathi, R. (2020). Impact Of E-Banking Services with Customer Attitude And Satisfaction With Special Reference To Chennai District. *European Journal of Molecular & Clinical Medicine*, 7(10), 2585-2596.
3. Mittal, S., Pant, A., & Bhadauria, S. S. (2017). An empirical study on customer preference towards payment banks over universal banks in Delhi NCR. *Procedia computer science*, 122, 463-470.
4. Ghrbeia, S. (2020). Customer Perception towards the Digital Payment.

### **Reference Websites**

- [www.karnatakaapex.com](http://www.karnatakaapex.com)
- [www.ijeast.com](http://www.ijeast.com)
- [www.shodhganga.inflibnet.ac.in](http://www.shodhganga.inflibnet.ac.in)

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- [www.rbi.org.in](http://www.rbi.org.in)
- [www.google.com](http://www.google.com)
- [www.ippbonline.com](http://www.ippbonline.com)
- [www.paytmbank.com](http://www.paytmbank.com)
- [www.finobank.com](http://www.finobank.com)
- [www.airtel.in](http://www.airtel.in)



### Technological Evolution of Postal Services in India

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#### **ABSTRACT:**

Over 150 years of existence in the field of telecommunications, Department of Post (DOP-GOI) has rendered remarkable service to the mankind in India. The department of post has become successful in sustaining its position as largest postal network in the world touching the life of every citizen. This study aims to find the technological evolution of postal services and its widespread network in India.

This empirical study has been conducted based on the data collected from secondary source; official website of DOP- GOI, and other authentic sources. The authors have collected primary information through interactions from the staff of DOP-GOI to get more insights to do the research.

This study aims to find new technologies and methods adopted by DOP to optimize its services and operations. The study also describes and suggests specific solutions to enhance its postal operations and services in rural and urban India.

In conclusion, technological transformation of postal service enhances the ease of life for common man and also supports the economy of India.

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**Key words:** Department of Post, Postal service, Technology, Telecommunication.

### **INTRODUCTION:**

Postal System of India operates under Department of Post (DOP) headed by ministry of communication. The postal network of India is dated back having a history of rendering about 150 plus years of service to society.

Indian postal service is successful in reaching every nook and corner of the country providing its various diversified services right from delivering mails or parcels to offering retail services and hence been named as largest postal network in the world.

It has gone through many hardships in retaining its position in the market amidst emerging tough competitors.

Lot of initiatives taken by postal department to compete with technological changes and advancement in the field of communication

Government of India always has been striving hard to optimize the efficiency of services by computerization and digitalization of its operations.

During early 1990's, DOP started modernizing its services by adopting various technologies for existing services.

This study mainly revolves around analysis of the transition process of Indian postal service and various initiatives taken by DOP in adopting itself to technological changes constant efforts on improving the quality of service along with providing stiff competition to other delivery service providers in the market.

\*All images are sourced from Google

Figure showing Evolution of postal Services

**Figure showing Evolution of Postal Services**



### **REVIEW OF LITERATURE:**

K. Selvaninayagam (2018) has studied the Evaluation of Logistic Performance Index using statistical technique of cluster analysis and multiple comparisons of means. The author found that there were various problems faced in Indian Postal service such as warehousing and transporting of goods to the customer. The study is based on data collected from the post offices of Salem.

Namakkal, Erode. It focuses on the challenges faced by the people who take up the trading activities using the logistic performance index. Logic Performance Index (LPI) measures the major problem of Indian postal service such as High logistic costs and low quality of services. The research is made by considering some of the logistic performance index such as customs index, infrastructure index, tracking, tracing and timeliness index, international shipment index, logistic quality and competence index. The indices help in measuring the performance of logistic management and can compare the performance with other nations.

D. Bhuvaneshwari (2022) has studied the digitalization and its impact on Indian postal service. The researcher conducted the research based on the primary data which are collected from the employees working at various postal departments through the questionnaire. The problems in implementing the digitalization include poor technology, lack of skills, lack of proper infrastructure, outdated technological assets. The author suggested improving the technical skills among the employees by providing them an adequate training and adoption of new training.

Yogesh K Dwivedi (2023) has studied the challenges and opportunities of information technology. The author presented a case study to analyze the challenges faced through adopting digitalization and also the opportunities available in implementation of digitalization journey of Indian post.

The study has been made through collecting the data from the various post offices of rural branches and conducted the semi structured interviews with customers, shareholders and branch postmasters across the states of Uttar Pradesh, Haryana and Rajasthan.

This study concludes that adoption of modern technology will lead to stability in finance, Evaluation of implementation of mobile banking, online banking and digital payment apps.

Dr. CharusheelaBirajdar (2016) has studied the review of customer satisfaction for Indian postal service. Due to the globalization India faced a problem in adopting the technology. The customer satisfaction gives financial stability of the postal department in retaining the customer by satisfying their wants and needs. The aim of the researcher is to find out the customer satisfaction level in adopting the modern technology and infrastructure. The author collected the primary data through the questionnaire from the customers. The responses were collected from 50 customers to understand their satisfaction level in Indian postal service. The author suggested to adopt the technology and provide the service at reasonable price will increase the customer satisfaction.

### **RESEARCH GAP:**

Indian postal service is the largest network of postal services in the world, covering 154761 post offices spread across geographical location of Indian territory. Being the largest network of services, it is prone for many challenges to survive in the digital era, where people have adopted the modern means of communication like, email, SMS, WhatsApp etc. This situation has prompted us to study the technological challenges and evolution of technology in postal services in India.

### **OBJECTIVES:**

- To shed light on various technologies being adopted by DOP in improving postal services
- To discover various challenges faced by postal department in ensuring competitive edge over other competitors in field of communication
- To provide suggestions for adding value to the services rendered and ensuring their online presence through digital platforms

### **METHODOLOGY:**

This exploratory research has included the information collected through primary and secondary sources. Primary source of information about the transformation of postal services from the ancient days to present days has been collected through a structured interview with the postmaster and other staff of MSRIT post office, Bangalore. Secondary sources of information have been collected from the official website of India Post and other authentic sources.

### **FINDINGS AND SUGGESTIONS:**

DOP launched ARROW a project in year 2008 mainly for modernizing and updating various post office services and digitalizing the operations. The main focus was on improvising the nature of services in core areas like banking and financial services. The aims of this project are:

- To transform Indian postal service into dynamic and secured service provider
- To ensure key Performance Indicators in all areas for timely measuring the accuracy of transactions
- To enable Postal sector to take major initiative towards improving social and economic status of country.
- To provide best returns on customer's investment and financial benefits through various schemes

### **Few achievements under this project are;**

- Delivery of mails – tracking facility
- Remittances – quick delivery of money order including international payments and transfers
- Technological Advancements – Introduction of RICT, DARPAN devices
- Human Resource – upgrading the soft skills of employees
- Infrastructural improvement – improving the interiors as well as external appearance

Initially 50 post offices were covered under this project. as of 2012, 1736 post offices were being benefited by this project and the number continues till date .

Our discussion on technological transformation is focused on wide range of products and services offered by India Post;

- Mails and stamps
- Parcel delivery
- Core Banking services
- Foreign remittance services
- Postal Insurance

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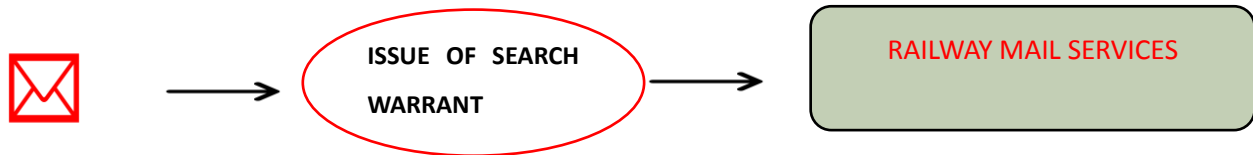
- Business E-commerce services
- Doorstep delivery and other agency utility services

### Mail and Stamps

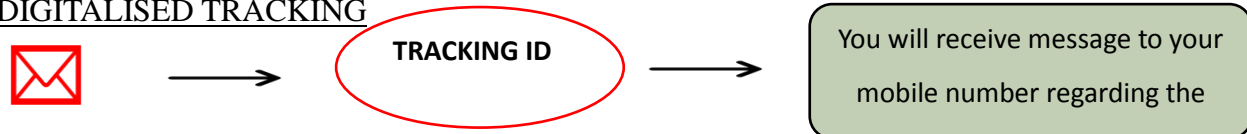
One of the prominent and primary functions of every post office is transmission, processing, delivery of mails. The messages which need to be conveyed are categorized under mails. It includes Inland letters, Speed post, postal cards, and value payable articles

Earlier more concentration was majorly provided on delivery of mails. Whenever the message was sent from distant place to other corner of country one could not have access to track or trace the status.

### MANUAL TRACKING



### DIGITALISED TRACKING



### Rural Information Communication Technology (RICT)



Under the IT modernization project, India post 2012 has introduced RICT device to track the article status. This RICT project known as DARPAN “Digital Advancement of Rural Post Office”.

This DARPAN project was launched by The Minister of Communication to ensure improvised quality of services and enable “Financial Inclusion “of unbanked rural community. NITI AYOOG is managing NGO DARPAN which has been started to maintain a healthy partnership among NGOS and Govt of India.

### Stamps

Indian postal service had achieved robust network connectivity among the different parts of country. The first stamp was introduced in India in 1852. A stamp refers to a tiny piece of paper stuck on address side of any mail or couriers. Postal stamp denotes specific value paid as postage fee.

DOP has taken innovative initiative of introducing personal customized stamps. Any person can obtain a stamp with desired photo affixed on it which can be used as a stamp. Any business, individuals or company can order for personalized stamps from DOP.

Today there is an emergence of new concept of digital Stamping in India. Any individual can obtain a digital stamp from the post app which has unique twelve digit number on it. One can use this digital stamp on the mail which he wishes to send to others.

### Core Banking Services

Department of postal service took initiative to provide financial services for all customers across country. DOP has plans for leaping towards banking industry which was revealed in 2013. Gradually from 2016 Indian Postal Department started providing core banking services. DOP provides variety of savings and remittance services, conduct more secured transactions than other banks. It has been extending its services even for upliftment of rural community in providing various saving schemes that provide high rate of interest. Through DOP Net Banking service Indian Postal Service is competing on par with commercial banks. Following are the major facilities provided by DOP

- Saving Account (SB)
- Time Deposit Account
- Recurring Deposit Account
- Money Order
- International Money transfer services
- Mutual Funds

IPPB – India Post Payment Bank was inaugurated by Honorable Prime Minister Narendra Modi on September 2018. IPPB offers Door step Banking (DSB) to all citizens of country DOP has



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wide network of post offices which has been attempting to make all core banking facilities accessible to rural community at very minimal or nominal charges. Deposits and withdrawals, payment of bills, life insurance and various other service can be accessed through doorstep service facility. Secured, convenient, banking service. DOP also provides other utility services which includes Business Development Products, such as Aadhar Enrollment, bill remittances etc. DOP has completely in the process of digitalization of all banking services.

### **International Services**

India post facilitates safe transfer of parcels through airways. International Air Parcel service provides retail customers quick and secured merchandised services. International tracking Id is made available to track the article status. In order to facilitate international money transfers India Post have tie up with Western union. One can safely conduct money transfers globally. Around 10,000 post offices are part of Western Union Agents. This international service offered by post office is real, quick and trustworthy. The relationship of Indian post and Western Union is more than a decade long and known to be most successful Public Private Partnership. India post has tie-ups with other country posts in order to deliver international services effortlessly.

### **E-Commerce Delivery Services**

E-commerce has emerged as a new trend. Adopting new technologies Indian Postal service is coping up with this emerging trend. With the rise of E-commerce, the postal department is finding more opportunities for delivering small parcels and packages across the country through their largest network. India Post has partnered with various E-commerce portals to deliver their consignments and packages on cash on delivery and prepaid basis.

### **Electronic Indian Postal Order (E-IPO)**

Department of Post, Ministry of Communications and Technology has launched the scheme of E-IPO. IT facilitates citizens of India to purchase an Indian Postal Order electronically through online fee payment. This helps them in seeking information under RTI act,2005. One has to attach this E-IPO along with RTI application. This enables them purchasing of an IPO electronically.

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Along with these above mentioned services DOP has been rendering various other ancillary services like postal Insurance for both rural and urban community, Business Post, Media Post, Logistics Post etc.

In order to attract potential customers and to rank top amongst other competitors India Post is engaging them in introducing various schemes for betterment of society and improve their financial status. Some of them are:

- Senior Citizen Savings Schemes
- Public Provident Scheme
- National Saving Certificate
- Kisan Vikas Patra
- Sukanya Samridhhi Yojana

### **CHALLENGES FACED BY INDIA POST**

In spite of lot of advancements in various fields by Indian Postal Department, there are some of the drawbacks and challenges faced by Indian Postal Department

- Administration cost - India Post has the largest network coverage in the world. This being an advantage on one side and a big lacuna or challenge from the other perspective. DOP provides various services at very minimum charges. A major portion of the revenue earned is spent towards administration of all branch operations.
- Lack of skill sets – Introduction of various technologies in DOP also requires well trained skilled employees. DOP lacks such skills among existing employees. Hence lot of training sessions need to be conducted for skill enhancement
- Infrastructural Issues – many post offices in rural areas are yet to be modernized on their physical appearances.
- Stiff competition– The emergence of various private courier service competitors who are major players in courier industry, gives severe competition to DOP. Competitors such as DHL, FedEx, Bludart provides more convenient easier and smart services with updated technologies.

### CONCLUSION:

It has been observed that the Department of Post has brought various projects, and schemes in providing the services to the citizens, in the present digital era. To sustain its position as single largest postal network in the world, the department has initiated usage of technology in all areas of its services. Through digitalization process, the department can minimize use of paper and be environment friendly. Build infrastructural facilities like, internet, telecommunication at the rural and as well as urban India. Providing UPI payment options at all post offices can still ensure better services to the people in specific and economy in general.

### References:

- Dr. CharusheelaBirajdar and Prof. Akshata Joshi, A Review of Customer Satisfaction for Indian Postal Services. *International Journal of Marketing and Human Resource Management*, 7(3), 2016, pp. 49–59.
- <http://www.iaeme.com/ijmhrm/issues.asp?JType=IJMHRM&VType=7&IType=3>
- K. Roy, (2005) A System for Indian Postal Automation presented in IEEE conference. <https://ieeexplore.ieee.org/xpl/conhome/10526/proceeding>
- Bhuvanewari and Tamilarasi (2022) Digitalisation And Its Impact on Indian Postal Service Sector - A Study Using Structural Equation Modelling, *Journal of Positive School Psychology*, Vol.6, No.3, 7930-7937
- Francina, Jothi. (2018). Evaluation of Logistic Performance Index of India in the Indian Postal Services. *International Journal of Engineering and Management Research*. 8. 10.31033/ijemr.8.5.10.
- Sinha, S.K., Mukhopadhyay, S., Upadhyay, P., Dwivedi, Y.K., Bhattacharyya, S., Paul, M. and Bhattacharyy, A.K. (2023), "Challenges and opportunities in IT transformation of public service delivery: case of India Post", *Transforming Government: People, Process and Policy*, Vol. 17 No. 1, pp. 134-146. <https://doi.org/10.1108/TG-04-2022-0053>
- *Vaculik, Juraj&Tengler, Jiří&Ondrej, Maslák. (2013). THE IMPACT OF NEW TECHNOLOGIES TO IMPROVE DELIVERY PROCESS OF POSTAL MAIL.*

**HIGHER EDUCATION AND EMPLOYABILITY IN INDIA**

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***Abstract:***

*This paper focuses on the relationship between higher education and employability in India. It evaluates the employability of graduates in Indian Higher education system focusing upon the challenges our education system is facing. India has the largest number of young people with higher unemployed rate.*

*Educating skilling and productive employment should become the matter of highest priority. Higher education is a path way to country's development. Any economic success is dependent on the country's education system.*

*It has been observed and remarked that, the recent graduates from various Institutions are not employable, it is within this context this article intends to contribute with the critical discussion on issue of graduate' employability.*

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***Keywords:*** Higher education, skills, employability

**Introduction:**

Education in broad sense is everything that is learned and acquired in life time: habits, knowledge skills, interests, attitudes and personality. Education is the process by which people's abilities and talents are developed. In narrow sense, education is the systematic, organized, process of teaching and learning that centers largely in some form of schools.

Education benefits the individual as well as society in which he lives. Education has acquired great importance in all society it helps to prepare the men and women who direct and carry out the varied activities required in a modern society. Education is considered to be essentials in a modern democratic society.

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### **History of Education**

Education system in India is dates back where the children were taught in Gurukulas and Gurushishya system was the means of education. The history of education in India begins with the teaching and traditional elements such as religion, Indian Maths, Indian logic at early Hindu Buddhist centre's of learning. India is known to have most famous universities like Nalanda, Takshshila, Ujjain, and Vikramshala. But over a period of time it has been observed that the educational Institutions are finding it challenging to provide world class education to the society.

### **Importance of Education**

All round development of personality is the main objective of Education. The role of higher education in the growth and progress of a nation has been well recognized for centuries. Schools and other Institutions play a vital role in preserving and extending a nations cultural heritage.

Higher education is considered throughout the world to be the key to both individual and societal aspirations. For individual, education beyond the secondary level is assumed to be the way to social esteem, better paying jobs, and expanded life options. Higher education is assumed to be the key to technology, productivity, and the other ingredients of international competitiveness and economic growth.

### **Education in India**

Schooling is usually divided into 3 stages or levels. Elementary (primary), secondary (usually called high school) and higher education (colleges and universities and professional Schools) Adult education is often considered as fourth level.

After passing the higher secondary examination (grade 12 examinations) students enroll in general degree program such as bachelor's degree in Arts, Commerce or Science or professional degree program such as Engineering, Law, or Medicine.

Indian school education system is the 11<sup>th</sup> largest is the world, with more than 100 million students enrolled in thousands of colleges and universities. The main governing body at tertiary level is UGC which enforces its standards, advises the government and helps to coordinate between the central and state accreditation for higher learning. Accreditation for higher learning over universities under the aegis of UGC is overseen by 15 autonomous statutory institutions.

### **Objectives of the study:**

1. To understand the challenges faced by higher education system in relation to the employability
2. To identify the need of re skilling of students in higher education system

### **Research methodology:**

It is a study based on secondary data from official reports of Government and non Government organizations, newspapers, and Articles of eminent personalities from Education and corporate sector. It is a substantive study focusing on the roadmap for the modern day education system

### **Higher education and employability in India**

Indian Higher education system has undergone massive expansion in post independent India with national resolve to establish several Universities, technical institutes, research Institutions, professional and degree colleges all over the country to generate and disseminate knowledge to common citizens of India. The rapid growth in this sector both in terms of enrollment and number of Institutions has thrown up new challenges of maintaining quality of higher education.

Despite the rapid increase the size of skilled labors still small as compared to the demand of the modernization, Industrialization, and international integrated process. At juncture when the percentage of employers facing difficulty in finding skilled workforce is as high as 81% in Japan, 64% in India, 63% in Brazil and Turkey, 41% in Australia. These numbers wonder us that what is it we are learning from our Universities and educational Institutions. Given the correlation between education and employability, the biggest challenge confronting us is low employability of our graduates passing out of the higher education Institutions. The surveys carried on job market have brought forth some starting facts.

The new Annual Employability Survey Report by Aspiring Minds (2019) reveals that 80% of Indian engineers are not fit for any job in the knowledge economy and only 2.5% of them possess tech skills in Artificial Intelligence (AI) that industry requires. Another survey on graduates finds that as 47% of Indian Graduates are not employable for any industry role. Most of the graduates (approx 40%) were found suitable for clerical or secretarial roles.

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A similar report On MBA's informs that employability of Management graduates in functional domain remains below 10%.

The Factors affecting the higher the Higher education sectors which affect employability of our educated youth can be enlisted as follows

1. **Standards:** Higher education is within the domain of both central and state legislature. Which are managed by both public and private sectors in India. Universities and colleges suffer from quality variations. The study by UGC reveals that around 70% of universities fall under medium or low-quality category. Thus, there is gross necessity of standardization of quality
2. **Curriculum:** The curriculum in most of the cases is outdated and irrelevant and this is a key reason for such a negative rate of employability. Inadequate preparation in the domain area i.e. the ability to apply basic principles. Hence there is a gap between the theories what the students learn in their higher education and in its practical application.
3. **Inadequate number of teachers:** Around 35% of faculty positions in a state Universities and 40% in central universities lying vacant. There is no mandatory teacher training program conducted to develop effective teaching skills.
4. **Teaching methods:** There is no one teaching method that fits all students. The traditional method of providing instruction to class as a whole is more successful with some students than with others.
5. **Skills development:** the lack of English language and cognitive skills are identified as the major obstacles to the suitability of the students in the job market.
6. **Financial Issues:** A serious implication of increase in cost of higher education and the imbalance in the fee structure of private and the public education is an important and factor which reduces the opportunities available to the students.

These findings have sparked serious concerns about the mismatch between education system and the needs of the job market. The state of Indian higher education has always been in question more specifically for its quality when it is compared with the quality with the required skills set and with the higher education system of other developed countries our higher education system seems to fall short of quality up date course structure and the way education is imparted.

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We are living in the era of industry 4.0 when AI, machine learning, and robots are being extolled as growth drivers. As a result, we need Education system that utilizes contemporary and traditional techniques via digital platforms and multimedia learning to educate students and learners in this increasingly technological environment.

Various changes have been implemented to increase educational quality in the country. Education investment will almost certainly rise over the next few years. Many reforms have been outlined in the National Education Policy 2020 and more are under way.

The wheebox India Skills Report 2023, in collaboration with CII, Tagged, AICTE, AIU, Sunstone, Pearson, AWS and Economic Times, examines the demand and supply for talent of jobs. The findings of the report suggest that in contrast with last year's employability figures of 46.2%, 50.3% of young people were found to be highly employable overall, according to ISR 2023, which is significant improvement.

**To conclude**, educating skilling and providing productive employment should become the matter of highest priority. Nelson Mandela had called “**Education the most powerful weapon which you can use to change the world.**” It is the most potent tool to empower an individual or group politically, socially, and economically. Productive and gainful employment based on relevant education and skills becomes transformational ingredient in all round empowerment of citizens and overall progress of the Society.

### REFERENCES:

1. Journal on critical Review, volume 8, Issue 1, 2021
2. Indian Skills Report 2023
3. Bussinesstoday.in
4. <http://www.ilo.org>
5. [www.google.com](http://www.google.com)



**MOBILE BANKING IN INDIA: A BRIEF STUDY**

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**ABSTRACT:**

Banking is the backbone of every industry and technology plays an important role in every industry. The role of technology is increasing very rapidly day by day, which is also promoting the banking industry. Banking is one of the largest financial institutions which regularly explore the opportunity of technology to provide better customer services. In today's business, technology has been the largest indicators of growth and competitiveness. The banking industry today is in the era of its revolution.

The increased dominance of mobile phones provides exciting opportunities for the growth of mobile banking. Mobile banking is a system that helps the customers to conduct a number of financial transactions with the help of their mobile devices.

Mobile banking is a revolution that is driven by the world's one of the fastest growing sector, mobile communication technology. In this context present paper makes an attempt to understand the present status of mobile banking in India, to know the recent developments in mobile technology, to study about the importance of mobile banking in India and to give suggestions for improvement of mobile banking.

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**Keyword:** *Mobile Banking, Technology, Generation.*

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### **INTRODUCTION:**

The Banking sector is the lifeline of any modern economy. It is one of the important financial pillars of the financial sector, which plays a vital role on the functioning of an economy. It is very important for economic development of a country that its finance requirements of trade, industry and agriculture are met with higher degree of commitment and responsibility.

Thus, the development of a country is integrally linked with the development of banking. A bank is a financial intermediary and money creator that create money by lending money to a borrower, thereby creating a corresponding deposit on the bank's balance sheet. Lending activities can be performed directly by loaning or indirectly through capital markets.

The mobile phone is the one device that people already carry at all time and service beyond voice and text messaging are booming all over the globe. The main reason that mobile banking scores over internet banking is that it enables 'Anywhere Banking' customer now don't need access to a computer terminal to access their banks. They can now do so on the go when they are waiting for their bus to work, when they are travelling or when they are waiting for their orders to come through in a restaurant.

Technology has revolutionized all the aspects of our life and even the banking sector is no execution from computerization to networking, to internet banking and now mobile banking, the banks have advanced with time and are providing more and more new form of services which are not only convenient to customer but also provide competitive edge to the banks.

With mobile technology banks can offer a wide range of services to their customer such as doing fund transfers purchasing stocks access to account information etc. This is called mobile banking or M-banking.

### **OBJECTIVES OF THE STUDY:**

1. To understand the present status of mobile banking in India.
2. To know the recent developments in mobile technology.
3. To study about the importance of mobile banking in India.
4. To give suggestions for improvement of mobile banking.

### **MOBILE BANKING IN INDIA:**

Technology and financial inclusion are the popular coinage in banking parleys in the country, while technological up gradation and mobile banking are catching up so fast, financial inclusion is relatively tardy in progress.

Given the reach of the mobile phone connectivity and associated communication technologies in India, mobile banking has the potential to emerge as a positive strategy in terms of costs, convenience and speed of reach.

Banks are constantly adopting technology to expand its business and to reach different level of customers. The development in Information and communication technology (ICT), comfort and access of services and competition with peer forced banks to introduce mobile banking services in India.

First mobile banking transaction services in India were offered by ICICI bank in January 2008. Now, 32 banks had been granted permission to operate mobile banking in India. Evolution of different technology in communication system and mobile device is a major challenge to mobile banking.

India is a country where different languages are used in different parts. India has 18 official languages which are spoken across the country. The state governments also are dictated to correspond in their regional language for official purposes. Therefore, customer support must be provided in vernacular languages that should always keep in mind the variations in literacy levels. The mobile banking facilitates to access banking service to the rural community. This requires customer friendly banking software that can be used in their local language.

Once the customer becomes confident on technology it will automatically increase the adoption of mobile banking in mass. Indian mobile banking users are specially concern with security issues like financial frauds, account misuse and user friendliness issue-difficulty in remembering the different codes for different types of transaction, application software installation and updating due to lack of standardization.

For mobile banking to be acceptable by society in general, it is important to understand the mindset of Indian consumers who are wary of investing their money on a technology which appears virtual. Other problem is that for mobile banking to be user friendly, one is dependent on good telecom service quality in urban and rural India. Urban India, its rapidly expanding cities suffer from a lingering problem of network congestion during rush hour.

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This would result in delays in delivery of SMSs that would translate into hindrances to customer's financial transactions. In rural India, there is lack of awareness amongst customers owing to language and literacy barriers.

Mobile banking system is enjoying a rapid growth in India. It has successfully crossed the introduction stage. Mobile banking services are growing both in terms of volume and value of transaction. In India, mostly young and educated customers are very much interested to apply and avail mobile banking services. Convenience, '24 X 7' flexible services, speed and quick financial decision are the factors responsible for motivating customers to use mobile banking system. In India, mostly bank-focused mobile banking model has been used and offered services.

### **DEVELOPMENTS IN MOBILE TECHNOLOGY:**

Motorola was the first company introduced mobile phone in the year 1973, which is very costly and also more weight (in Kgs) when compared with present mobile sets which are cheap and small in size.

**1st Generation (1G):** The first analog cellular system widely deployed in North America was the Advanced Mobile Phone System (AMPS). It was commercially introduced in the Americas in 1978, Israel in 1986, Australia in 1987 and India in the year 1995.

**2nd Generation (2G):** Second generation mobile communication replaced the analog signal with digital signal.

There are two major technical developments occurred that is GSM and CDMA technologies. The NTT DOCOMO in Japan introduced internet service on mobile phones in the year 1999.

**3rd Generation (3G):** The mobile phone became essential communication system for millions of users worldwide. The 3G technology developed with the concept of packet switching instead of circuit switching for data transmission.

**4th Generation (4G):** The fourth generation<sup>4</sup> technology introduced in the year 2009 with the technology advancement like WIMAX & Long Term Evolution (LTE) technologies.

**5th Generation (5G):** The fifth-generation telecom services were rolled out in India on 1 October 2022 to the first 13 cities, 5G will eventually be available nationwide. And Apple, Google, and Samsung have promised updates soon to their more recent phones to enable 5G service on them.

### IMPORTANCE OF MOBILE BANKING:

- **Easy Accessibility:** Mobile Banking provides the customers to anytime and anywhere banking with the help of mobile telecommunication services. This facility is very easy accessible by each mobile internet users. It also saves a lot of time.
- **Security:** Mobile Banking is very safe and secure with the help of mobile pin (m-pin). Each user of mobile banking is secured by pin number which was firstly issued by the bank but we can change it many times as per the needs of the customers. All the transactions through mobile banking can be easily operated by the customers and all records will be safe in the account details.
- **Less Cost:** Mobile Banking is less expensive comparative to other modes of banking. There are various types of charges imposed by the banks when we use other modes of banking likes ATM facility, but through mobile banking there are very less or no charges will be charged by the banks.
- **Speed:** With the help of new technology like 5G services, the customers make their banking transactions in the fraction of seconds. Mobile Banking is done by the mobile internet users in a very fast speed as compare to another mode of banking. For Example: If we want to deposit the money in branch, firstly we have to wait for our turn in a big queue to reach the counter but these hurdles can be easily removed by the usage of mobile banking.
- **Universally Accepted:** Mobile Banking is universally accepted by the each bank. The customer operate their bank account at anywhere in the country with the usage of mobile internet. It is widely accepted by the banks at anywhere and anytime.
- **Account Statement:** If we need our account details immediately, it is only possible with the online and mobile banking. Mobile Banking provides us immediate effect of banking transaction on our mobiles with SMS and Mini statements on our mobiles.
- **Increasing Customers:** Mobile Banking helps the banks to increase their customers. We know that the frequency of mobile users is increasing at very high speed but the frequency of banks account holder is very less. So, mobile banking is a new technological platform to the banks to increase their customers.
- **Always Connected:** Mobile Banking gives us an option to always connect with their bank accounts for getting the updating of every minute. Some account holders have large

transaction per day. With the help of downloading the mobile banking application and software of their banks, they can get the update of their account by every minute or second.

- **Economic Development:** Today, still there is large portion of our population which has no bank account but with the help of mobile banking awareness especially young account holders will open the bank account and helps in economic development.

### **SUGGESTIONS:**

1. Banking operations through Mobile Banking should be cost effective
2. Authenticity and safety of operation should be ensured by Bank.
3. Proper guidelines should be given to the customers regarding usage of Mobile Banking
4. The banks must ensure to update the software and more services through Mobile Banking.
5. There should be call centre feedback.
6. Social media monitoring.
7. App store reviews monitoring.
8. Create awareness of useful applications among young consumers.

### **CONCLUSION:**

Mobile Banking is easy to use and can be use any time anywhere due to its mobility. The mobile banking in India is becoming very famous because of the digital payment system. But still some account holders are not aware about the mobile banking and avoid using it. In India people still believe that traditional banking is safe and best to handle. There are young and professional persons have more using of mobile banking.

### **REFERENCES:**

- Gayathri R and Dr.S.Gandhimathi, “A Study on Customer Satisfaction towards Mobile Banking Services with Special Reference to Coimbatore City”, International Journal of Creative Research Thoughts (IJCRT), Volume 9, Issue 5, May 2021, Page No 735-736
- V. Devadevan, “Mobile Banking in India –Issues & Challenges”, International Journal of Emerging Technology and Advanced Engineering, Volume 3, Issue 6, June 2013, Page No 516-517

## **Growing Infrastructure A key to Transforming Indian Economy**

---

- Manav Aggarwal, “A Study on Importance of Mobile Banking”, Indian Journal of Applied Research, Volume 4, Issue 5, May 2014, Page No 116-117
- Malusare Lalita Babulal, “Mobile Banking in India: A Review”, International Journal of Scientific Research and Engineering Development, Volume 2, Issue 5, Sept-Oct 2019, Page No 687.
- Dinesh Joshi, “Mobile Banking: An Outlook for New Digital Payment System in India”.
- Mrs. Sunindita Pan, “Mobile banking in India”.
- [www.google.com](http://www.google.com)

**A STUDY ON THE IMPACT OF GAMIFICATION PRACTICES IN HR ON  
EMPLOYEE CAREER DEVELOPMENT IN AUTOMOBILE INDUSTRY**

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**ABSTRACT:**

In this competitive world the global economy has been introduced to a platform of gamified learning. To achieve this, Gamification plays a vital role in HR to boost the employee career development. The well-known multinational companies have paved ways for gamified learning to serve as a source of motivation, recognition, employee engagement, productivity enhancement, work-life balance, and potential positive feedback for individuals at the automobile industry. The advantageous factors of gamification in HR are by engaging with employees of the organization and solve complex problems through practical games sessions such as case studies, quizzes, workshops, individual skill development which create better interaction and multi-diverse communication as well as orientation at the automobile industry. The present study also focuses to analyze the knowledge and awareness of the employees about gamification practices in HR.

To examine the employee's involvement with the usage of gamified learning. It is expected that the study's result may throw light on the impact of gamification on an employee's career development. The major implementation of gamified learning has been highlighted during the pandemic and post pandemic with the help of digitalization platforms which creates a source of employee career progression and individual up gradation of potential skill sets.

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**Keywords:** Gamified learning, Employee career, Motivation, Recognition, Digitalization, Techniques.



### **INTRODUCTION:**

In the present scenario the global economy has been changing to a landscape of introducing gamified learning. It takes number of years to master in a profession and no longer does short cuts pave way for long term consistency in the organization. With the framework of games, milestones, rewards, awards, and continuous feedbacks it contains a potential to transform gamified learnings and qualities which results in active career progress. Gamification has provided employees to gain achievement and recognition. This process of game learning has been serving as a motivation to the employees to improve their skills, productivity, work-life balance, achievement, progression, and potential positive feedbacks for their individual development at their workplace. The advantageous factor about gamified learning in this era was to cooperate and work as a team to experience more engagement in learning complex situations, enable creativity through practical game sessions like workshops, develop the unknown skills of the employees, increase their productivity by indulging in practical gamified sessions, adaptability of instant feedbacks during the one-to-one interacting sessions. Gamification helps in better interaction and multi diversified communication.

It serves as a method of career development progress for the present millennial generation candidates or freshers as a form of encouragement. In the effectiveness of induction, onboarding and training and development programme the other exciting forms of games which are been performed for individual improvement can be business quizzes, problem solving case studies, role play, stress free decision making, commitment to pursuing evolving challenges in the chosen field of career development.

More recently the well-known tech savvy companies have been engaging themselves with modernized user engagement protocols post pandemic. The increasing brand visibility regarding the techniques which will benefit the employees in their career development is more about motivating the employee's performance through active participation of gamification practices. To retain the employees through the implementation of gamification it enhances hiring of highly qualified candidates which leads to retention of the employees in the organization. The organization has moved into the light of digitalization which has maintained brand functionality and reputation through virtual platforms of gamified learning during the period of covid.

Taking digital form of gamification post pandemic, it masters the education technology in India. A well-developed AI based gamification serves as a competitive strategy in the internet surfing world with well-designed cloud-based gamification user engagement. The progressive statistics where game learning has created employee's enhancement in their career progress which led to 85% of increase in productivity and 87% of happy working environment.

Irrespective of the positive impacts on career development certain relating challenges would create a sense of hesitation in case there is standardized form of gamified learning which would not create a sense of interest to the e-learners, having a wide range of gamification elements can cause a source of distraction to achieve a particular form of career progression.

The pros would always outweigh the challenges faced thereby creating a platform for enjoyable interface of content gamified learning. It consists of a structural functionality of bringing in healthy competition among the employees resulting in individual and companies overall career progress and achievement.

### **REVIEW OF LITERATURE:**

The objective of the study examined by Bernhard Göschlberger, Peter A. Bruck( 2017) According to human resource executives and business analysts, microlearning and game - based are two of the most popular topic areas in professional learning and corporate learning. Professionals who are already stressed at job role see basic reasoning as a way to compensate for an insufficiency of committed learning time. Gamification boosts the intrinsic desire to learn while also increasing user engagement. The study design allows for the observation of behaviour with and without the extrinsic motivation of an employee competition. Despite a substantial rise in activity when particularly in comparison to the groups studied in prior findings, users did not notice a rise in the typical daily number of learning sessions. They did, however, observe a transition in gaining knowledge duration from work time to daily news on evenings and weekends. As an outcome, they see game elements as a means to boost user engagement. However, trying to implement it in corporate environments to influence learning behaviour as intended presents difficulties.

According to the purpose on this research work Sean Hinton, Lincoln Wood, HarminderSingh( 2019) Gamification is a modern invention in motivating employees systems that involves the

use of game - based dynamics and fundamentals to influence behaviour in a way that boosts staff motivation and engagement. Professionals who really are obligated to use corporate game elements structures could encounter stress, which can negatively impact workplace employment relationships. This is due to the fact that corporate gamification systems exacerbate information availability disparities between employers and employees. As a result, this research focuses on the legality of gamification employee motivation systems.

This research project carried out a systematic examination of company gamification, followed by qualitative approach and an evaluate of the relevant legislation, to ascertain regardless of whether game - based learning in the place of work needs to meet workers ' organizations' legal responsibilities under their "duty of honesty" in the New Zealand setting.

According to our findings, well-designed enterprise gamification systems should encourage good employment relations and provide employees with adequate information and clarity. Deployments of enterprise gamification systems should indeed be preplanner, with employee participation and discussion supporting their implementation. Further than the "due diligence" commitment, gamification systems and personal grievance law should be investigated.

The aim of another study done by Marjolein Lips-Wiersma and Douglas T. Hall (2007) was that new career paths are receiving more attention in current organisational research. The concern that whether and how individual people are assume charge to manage their career development in an increasingly unpredictable career environment has been a significant focus of this research. The implication is that organisations are becoming less concerned with career management practises. At the identical moment, there really is indications that opposition to transformation has resulted from organisational changes like trying to delay the institution's search for flexibility, as described in this literature. This implies that placed on top are becoming more prominent in organisational management practises. It's in descriptive case study investigates whether individual people assume greater liability for their own career advancement during times of organisational change. We also look into whether this implies a decrease in the institution's commitment for career management. Individual people are taking full on more career responsibility, according to our data. At the same time, we noticed that the business in our study case had become more engaged in chosen profession management and development.

### **OBJECTIVES OF THE STUDY:**

1. To study various Gamification Techniques followed in automobile industry.
2. To find out the knowledge and awareness of the employees about gamification practices in HR.
3. To examine the employee's involvement with the usage of gamification.
4. To understand the impact of gamification on an employee's career development.
5. To find out the obstacles involved while using the gamification impulses in the automobile industry.

### **STATEMENT OF THE PROBLEM:**

Following the pandemic, the increased use of gamified learning has opened up a lot of opportunities for individual and group career advancement and development. Even though it was a good idea for the workplace, it has some drawbacks, like making rewards more important than results. It also makes people compete with each other, cons of the costs associated with it and the level of awareness it brings to working employees always make it hard to advance professionally. As a result, gamification is an attempt to evoke the same kind of progression and activate the same motivations through gamified learning.

To motivate the employees to do something that they first and foremost consider to be boring or unappealing by appealing to their concerns and create a sense of motivation rather than promoting a complicated platform of employee engagement. By asking a fundamental first-principal question, gamification emerged. Therefore, a person must already possess these propensities for profound involvement and engagement.

Because as human, of course they do have their respective consideration and opinions as to whether it adds value to their professional growth. Additionally, gamification is a method for consciously learning about and utilizing these inherent tendencies for success and good.

It is essential to be aware of the kinds of activities that would allow everyone to participate. Having a good set of gamified programs that would kick off the goals of gamified learning, such as business quizzes, badges, talent acquisition, the practical application of solving problems that would genuinely solve issues through simple methods rather than complex methods of gamified learning, and creating a source of career progression for each individual in the organization are all examples of good, gamified programs.

### **DISCUSSION:**

The number of qualified candidates available for new job openings has grown rapidly in recent years. The vast majority of individuals have the potential to excel in their careers. Businesses need to recognize those who can make a difference among a large crowd of capable and experienced individuals. Organizations must be unique and effective in order to gain a significant competitive advantage, but innovation and creative thinking come from people. They must, indeed, hire and choose the appropriate individuals to hold the appropriate jobs. Employee retention and workforce productivity are aided by gamification. Game mechanics have proven to be an effective way to interact in a virtualized world, particularly in the face of a pandemic. Using games to assist employees in meeting their communication goals and remaining connected even when physically separated.

The automobile industry has created a memory game to facilitate orientation program and to inspire team members to recognise the suitable dress code in order to comply with company policy. They use another adventure game that showcases various roles available in the organisation, provide details about each role as well as the competencies, training, and certifications required to excel in the role. This type of motivation encourages the associates to do effectively to measure the career graph. The scoreboard and associated rewards of the organisation have a significant impact in the approval of digital games in the automobile industry. This has aided to retain talent and has earned the company the reputation of being a people's firm and a futuristic innovative leader.

The various knowledge and awareness inculcated about the gamification process in HR has been utilized by the automobile industry, When "gamification" is combined with recruitment, it is widely termed to as recruitainment. Gamification can be used in the recruitment process to include quizzes based on industry challenges, company-related quests, and behavioural quizzes. If used correctly, this method of recruiting potential skill can be the best tool for ensuring that organisations have champions on their team.

The use of social media is clearly a successful route, and the new ways recruiters interact with candidates are enabling for further enjoyable experiences. Gamification is helping brands accomplish greater degrees of retention and reaching critical online communities. It means that gamified can be sustained in some ways by social media.

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The gamified recruitment process includes three stages. Firstly, organisations want to encourage job candidates to start exploring their hiring sites on the internet to gain knowledge more about the corporate world, principles, and mission before eventually implementing for a job vacancy. Second, once applicants are received, organisations want to make their job offers more appealing. Finally, organisations discovered that candidates recruited through employee referrals may outperform employees hired through traditional methods. As a result, game - based can be used to incent employees who are looking for people applying by awarding them points based on the reference they provided.

Gamification can help recruiters test candidates' abilities, motivate them to complete specific tasks, and engage them in the recruitment process in general. To be efficient, recruitment practises must land the best talent for the proper position within the organisation, and to do so, businesses must use the another very appropriate tools that today's technology has to offer. Corporate entities are seeking particular behaviours and personalities, which can be achieved by utilising gamified recruitment solutions. Simulation results and interactive activities are excellent tools for engaging employees in understanding real-life complex situations. Elaborate cases can be presented to employees or managers, who can then discuss and deliberate on them during vigorous brainstorming sessions. Game - based has also been investigated in the automobile industry. In specific, it does seem encouraging in sustainable travel behaviour.

According to, this addition in encouraging customers' optimism and participation in activities, game - based learning encourages them to use transportation, which not only decrease atmospheric co2 emissions and usage of energy but also reduces reliance on cars with lower emission of harmful gases. Employee suggests that game - based learning encourages trying to drive more environmentally and securely, enhances operators' focus and alertness during in the path, and reduces boredom while travelling.

The employees in the automobile industry have become mindful of the possible advantages of gamification. Game - based learning can reward employees who change every aspect of an exercise and complete every target task. Game - based learning not only reflects a means of rewarding environmentally responsible behaviour but also tends to make travel more interesting. This is, to the extent possible, the first concise review of how to apply game elements in automobile industry.

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Challenges and points have become the most prevalent gamification elements, followed by rewards. Following that are the scoreboard and social engagement components. Allowing people to establish their own objectives and indicators can have a significant impact because those who develop a competitive atmosphere that really can result in individual efforts and progress because once those who challenge their chosen goals. You can feel satisfied and accomplished if you make sensible attempts to accomplish identity objectives inside a reasonable time frame.

The employees engagement and involvement with the usage of gamification in HR can be achieved in the automobile industry. The first step is thinking about strategy is to determine and express specific business objectives that you hope to achieve through gamification. It encourages job candidates to learn more about the company before beginning the interview process. Understanding employee motivations through gamification is 74% perception and 26% technology. The technical employees respond to their colleagues' questions as to whether recognising their intrinsic motivations resulted in the company meeting its business objectives.

Gamification is a relatively new strategy for increasing worker commitment and loyalty by making the work processes enjoyable and rewarding. Gamification can increase employee engagement and decrease turnover. To use gamification successfully, managers must carefully consider the reward structure. This is intended for executives and owners of companies who are in charge of a virtual team and want to boost employee engagement.

Organizations do not need to create and maintain entire and dedicated gamification software. Games can be integrated and affiliated with the employee's work portal system if properly designed. However, one of the major challenges in implementing gamification in HR processes is the misconception that it is expensive and will necessitate significant additional expenses for maintenance. As a result, addictive behaviour develops.

Another issue with game - based learning is that it is thought to motivate addiction to the specific gamified process, which may interfere with employees' full resolution and other tasks. The ultimate goal of game elements is to keep a worker involved in a positive way; however, if gamification causes addiction and has a negative impact on employees' wellness and private lives, it will have a negative impact on organizational as well. Irrespective of the challenges the positive elements of game based learning have received a broader perspective which would be beneficial for the employees in the career development.

### **CONCLUSION & IMPLICATIONS FOR FUTURE RESEARCH:**

The ongoing improvement and changes that occur in the automobile sector require companies to transform their activities and, as a result, create fresh methods for the administration of HR development. This is an issue for automobile industries, whose activities are linked to their own capacity to satisfy the resource requirements of different consumer groups whereas exploring and exploring new energy sources. Because of these demands, employees must prepare types of work. Conventional forms of education make it difficult to meet the need to train and retrain specialists. Simultaneously, HR management departments face a challenge in developing a suitable atmosphere that is close to an actual industrial area. Therefore in , a multiple disciplines approach enables the interaction of professionals from various fields of science and practising to discuss problems of steadily increasing complexity and unpredictability, including those requiring consideration in the area of personnel learning. Game - based learning in Hr functions, especially in employee training and growth, is one solution to this problem. The study considers the necessary conditions for gamification usage in automobile industries, the employees who are familiar with technological and digital usage in practise, identifies potential methods of using game-based tools in Hr functions in the automobile industry, and proposes a learning process prototype based on a simulation model.

Using game elements and social networking sites for personnel administration to investigate the use of gamified learning tools in Hr functions has revealed that they have grown into a powerful tool in expanding staff involvement and the increased efficiency of professional tasks, implying that it might be suggested for implementation in the automobile industry, in which this kind of leadership tool is lacking.

The application of gamification practices in the field of human resources is unquestionably a novel area of study. It provides a framework for employees to develop effective communication skills. With the advancement of digitalization, it has managed to go viral in the business world by utilizing virtual platform techniques. The gamification process has transformed the traditional form of recruitment challenge into implied gamification recruitment tools. It has remained committed to positively impacting employees' career advancement through absenteeism reduction, encouraging employees to participate in healthy challenges, talent management, employee retention, learning and development through practical problem-solving methods, team



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building, fostering innovation and creativity, and so on. Gamified learning has effectively benefited employees both personally and professionally. It has decided to create as a source of improvement and to assist the current generation in achieving their future goals.

The present paper is conceptual in nature which has limited to the awareness of learning about the concept of gamification practices in HR in the automobile industry. This conceptual model can be further extended to an empirical study in order to know that implementation of gamification in a particular automobile industry. This conceptual paper is in the stage of data analysis on a particular sector, and it would give a meaningful interpretation about the knowledge, awareness, techniques, and obstacles faced by the particular automobile industry. Therefore, due to the time constraint this paper has been concluded with an conceptual framework.

### **REFERENCES:**

- Ansted, R. (2017, january 10). *convergence web magazine*. Retrieved from how gamification brings joy and motivation to career development: <http://www.ncda.org>
- Bruck, B. G. (2017). Gamification in Mobile and Workplace Integrated Micro Learning. *research gate*, 1-9.
- HALL, M. L.-W. (2007). Organizational career development is not dead: a case study on managing the new career during organizational changes. *Wiley InterScience*, 23.
- Nelson, A. (n.d.). *gethppy.com*. Retrieved from Gamification: Playing your way to better employee engagement: <http://gethppy.com/talent-management/gamification-better-employee-engagement>.
- Wallace, B. (2022, december 12). *Web pro news*. Retrieved from 4 ways businesses leverage gamification: <http://www.webpronews.com/business-leveraging-gamification-examples>.
- Meister, J. (2015, march 30). *corporation*. Retrieved from Future Of Work: Using Gamification For Human Resources:  
<https://www.forbes.com/sites/jeannemeister/2015/03/30/future-of-work-using-gamification-for-human-resources/?sh=184d978224b7> (seone, 2019).

**IMPACT OF WORKING CAPITAL MANAGEMENT ON  
PROFITABILITY: THE CASE OF AN MSME**

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**ABSTRACT:**

The main purpose of this study is to empirically test the impact of working capital management on profitability. For this purpose, this study uses return on assets ratio to measure the profitability of company and debtor turnover, creditors turnover, inventory turnover and current ratio as a proxy to measure working capital management. The study's findings indicate that working capital management significantly affects a company's profitability. Consequently, managers can increase the profitability of their companies by reducing the inventory turnover, the ratio of accounts receivable, and the percentage of creditors. The results show that the organization can boost its profitability through effective working capital management.

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**Keywords:** Profitability, Working capital, Management.

**INTRODUCTION:**

Working capital management is a crucial element that directly influences the company's profitability and liquidity. A company's ability to survive is significantly impacted by working capital. Working capital primarily represents a company's current assets. The primary components of current assets are cash, pre-paid expenses, short-term investments, accounts receivable, and inventories. The profitability and liquidity of a corporation are significantly impacted by the level of working capital. Effective working capital management affects both long-term financial performance and shareholder value maximization in addition to of a Mngt<sup>1</sup>.

of the relationship between current assets and current liabilities is known as working capital management. Making sure there is an adequate amount of cash requires careful working capital management. The foundation of the working capital management strategy is the continuous control of the quantity of cash and its equivalents, inventories, receivables, and other liquid assets, as well as the amount of due liabilities, on the one hand. A company with a low level of current assets as a percentage of total assets may choose to implement an aggressive working capital management strategy. Conservative working capital management refers to reducing risk by keeping more working cash on hand. A modest level of working capital in accordance with a modest level of sales is referred to as a modest working capital policy. Making ensuring that the components of working capital management are properly correlated is the key objective. Maintaining a high level of short-term assets reduces the company's profitability, whilst maintaining a low level of short-term assets contributes to a fall in liquidity. A large level of stocks is appropriate if an aggressive sales strategy is in place, but for businesses without a defined sales strategy, the inventories just add extra expenditures that are not necessary. The maintenance of liquidity in the day-to-day business activities of the company is the most crucial aspect of working capital management. This is essential to avoid short-term creditors and suppliers putting undue pressure on management and ensuring the smooth operation of the business. Businesses must continue to manage their working capital in a way that will optimize its worth.

### **REVIEW OF LITERATURE:**

The management of working capital by publicly traded companies in The Netherlands is the subject of this study. A sample of 37 enterprises is chosen. The working capital management practices during the 2004–2006 non–crisis period and the 2008–2009 Financial Crisis are contrasted. This comparison explores whether businesses must alter their working capital non-crisis policies when the economy enters a recession. The findings of this study suggest that if a company wants to increase profits during a crisis, it doesn't need to adjust its working capital policy with regard to accounts payables and inventories (Baveld, 2012). The study investigates the relationship between profitability and working capital. Information from 15 US trading companies from 2015 to 2019, there is a negative relationship between profitability and average collection period, this suggests that a reduction in the number of days a firm must wait before

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receiving payment from sales has a positive impact on the firm's profitability. This suggests that a company is more profitable the longer it pays its creditors. Lastly, if the cash conversion cycle shortens, it will boost the company's profitability. According to the results of the regression analysis, the model's R-squared value is 0.584, meaning that 58.4% of the variation in the dependent variable Net Profitability is explained by the independent variables (Syeda, 2021). The research sample consists of 119 non-financial listed companies on the Vietnam stock market, nine-years from 2010 to 2018. The empirical findings demonstrate the negative and significant effects of working capital management on the firm's profitability as measured by return on assets (ROA) and Tobin's Q. The working capital management is measured by the cash conversion cycle (CCC) and its three components, including the turnover of accounts receivable, inventory, and payable in days. It suggests that companies can boost profitability by maintaining the optimization of working capital management as assessed by the CCC (Hang Thu, 2020). In this study, the impact of working capital management (WCM) variables on the financial performance of steel businesses listed on the Vietnam Stock Exchange is investigated. Data was gathered from organizations' audited financial accounts over a ten-year period, from 2010 to 2019. The Twenty samples out of 26 companies, or 76.9% of the total, are qualified for research. Multivariate regression models are used to determine the influence of WCM on the firm's profitability through the dependent variable with the aid of the specialized software State version 14. The results from research has a significant effect on corporate profitability. Eight factors, including DPO, DIO, DSO, CR, SIZ, and GRO, have an impact on the profitability of steel firms. Only two parameters, CCC and LEV, have an adverse effect on profitability; however, the impact of CCC is minimal (Kien Xuan, 2020).

This study examines from 2014 to 2020, the relationship between working capital management and industrial enterprises' profitability listed on the Amman Stock Exchange (ASE). It has been examined using the information included in the annual reports of 23 listed industrial businesses. It used 161 observations to analyse the data. The empirical results show that the working capital has a detrimental impact on the industrial enterprises in Jordan's profitability. The significant element of the combination has both direct and indirect effects on the firm's financial situation, which will eventually be reflected in its value. This study adds knowledge to already available on the connection between WCM and emerging market profitability (Zakaria, 2022). The study used a documentary review of audited financial statements from businesses. Based on a survey of

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businesses, a design of sampling was used. Then, in order to avoid biases, firms were chosen from each organisation with purpose. As a result, the study chose a sample of 5 manufacturing companies and 13 merchandise companies for a seven-year period i.e from 2009-2015, with a total of 18 observations. Cross-sectional and time series data were employed in the quantitative analysis of the data using Pearson's correlation and pooled panel data regression models (Agegneu, 2019). This study investigates the link between working capital components and corporate profitability across several industries. This study uses data from 60 manufacturing companies, 20 construction companies, and 17 telecommunication companies that are listed on the London Stock Exchange and cover the years 2006 to 2011. Gross operating income is used to quantify the dependent variable, profitability and receivable days are the independent variables. Days for payments due, days for inventory, the cash conversion cycle, debt, and the size of the company. The relationship between the profitability and the working capital components was done using Pearson's correlation and regression analysis. The findings indicate that the working capital components and profitability have no link. Gearing and profitability in industrial enterprises have a negative relationship (Thuvarakan, 2013).

In this study, the impact of working capital management on firm profitability in Nepal from 2071 to 2072 is examined. Four-years of financial data is used for this purpose. The association between working capital management and a firm's profitability and elements of working capital such the average collection period, average payment period, and current ratio was established using Pearson's correlation and descriptive analysis.

The study discovers that profitability has a negative association with average collection and payment periods but a positive association with current ratio (Ojha, 2019). This study uses a quantitative research methodology for a period of five years beginning in 2014/2015 and ending in 2018/2019, data were collected from a sample of 46 Consumer Staple Sector companies listed on the Colombo Stock Exchange (CSE). STATA is used to analyze panel data and test the proposed correlations.

According to the study the inventory conversion period has a small effect on profitability. The Profitability is greatly and negatively impacted by Receivables Collection Period. Also, the study found that the Current Assets Ratio had a large beneficial influence on profitability whereas the Payables Settlement Period had a minor impact (Thenuwara M.G.S., 2021).

**METHODOLOGY:**

This research is based on the analytical study. The study attempts to measure the impact of working capital on profitability of Srinithya enterprise. The study has a mix of quantitative and qualitative methods to increase the accuracy of the research.

Source of data: Secondary data will be collected from the annual report of Srinithya Enterprise, sample size is i.e from 2018 to 2021.

The company's return on assets, current ratio, inventory turnover ratio, debtor turnover ratio, creditor turnover ratio, will be calculated for further analysis. Here, ROA is dependent variable and DTO, CTO, ITO, CR are independent variables.

**TABLE-1 IS EXPLAINING TO US THE DESCRIPTIVE STATISTICS WHICH COVERS THE MEAN, MEDIAN, STANDARD DEVIATION AND OTHER RESULTS.**

	<b>ROA</b>	<b>DTO</b>	<b>CTO</b>	<b>ITO</b>	<b>CR</b>
<b>MEAN</b>	13.8575	14.19	8.5175	8.31	13.8475
<b>Std. Error</b>	5.052343309	1.373517382	1.0984	0.9127	5.03803
<b>MEDIAN</b>	14.48965306	14.12872576	8.964609	8.618534	11.32156
<b>MAXIMUM</b>	25.23	17.61	10.48	9.96	27.38
<b>MINIMUM</b>	1.22	10.89	5.66	6.05	5.37
<b>STD. DEV</b>	10.10468662	2.747034765	2.19679	1.82539	10.0761
<b>VARIANCE</b>	102.1046917	7.5462	4.82589	3.33207	101.527
<b>SKEWNESS</b>	- 0.333209596	0.130446047	-0.8067	-0.568	1.01502
<b>Std. Error</b>	1.014185106	1.014185106	1.01419	1.01419	1.01419
<b>KURTOSIS</b>	0.059525275	1.450055926	-1.1647	-2.5169	-0.2831
<b>SUM</b>	55.43015463	56.75136371	34.07033	33.24826	55.39609
<b>RANGE</b>	24.01	6.72	4.82	3.91	22.01
<b>OBSERVATIONS</b>	4	4	4	4	4

### **CORRELATION TEST:**

TABLE 2:

	<b>ROA</b>	<b>DTO</b>	<b>CTO</b>	<b>ITO</b>	<b>CR</b>
<b>ROA</b>	1.0000	0.6626	-0.3262	-0.2913	0.4149
<b>DTO</b>	0.6626	1.0000	0.4430	0.4104	-0.3147
<b>CTO</b>	-0.3262	0.4430	1.0000	0.9820	-0.9856
<b>ITO</b>	-0.2913	0.4104	0.9820	1.0000	-0.9904
<b>CR</b>	0.4149	-0.3147	-0.9856	-0.9904	1.0000

The correlation demonstrates the strength or weakness of the relationship between the dependent and independent variables, based on how closely related they are. As a result, the information above demonstrates that how the dependent variable are correlated to independent variables.

In an effort to determine the relationship between profitability and WC, Pearson's coefficient of correlation analysis has been carried out. The study indicates that there is a negative correlation between the profitability and the ratios for the period. The correlation between the independent variable (ROA) and the independent variable (DTO, CR) has a positive relationship. There exists and negative correlation between independent variable (ROA) and dependent variable (CTO, ITO), which affects the profitability of the firm. There exists a negative correlation between CR and DTO, CTO, ITO.

### **CONCLUSION:**

The purpose of this study is to know the impact of working capital and profitability of the firm. The data was collected from the financial reports of Srinithya enterprises for a period of 4 years from 2018 to 2021. Descriptive statistics and person's correlation is used to analyze the data.

This study has examined the relationship between the profitability and other variables of working capital management such as Debtor turnover ratio, Creditor turnover ratio, Inventory turnover ratio and Current ratio. It resulted that there is a negative relationship between the profitability and current turnover ratio and inventory turnover ratio.

Therefore, the study shows that there is a strong relationship between the profitability and working capital of the firm. If the company manager keeps a close look on the liquidity of the firm, it will lead to profitability.

### **BIBLOGRAPGY :**

- Agegneu, A. (2019). The Effect of Working Capital Management on Profitability: The Case of Selected Manufacturing and Merchandising Companies in Hawassa City Administration. research journal of finance and accounting , 35.
- Baveld, M. B. (2012). 'Impact of Working Capital Management on the profitability of public listed firms in The Netherlands during the financial crisis'. university of twente, 91.
- Hang Thu, H. T. (2020). Impact of Working Capital Management on Firm's Profitability: Empirical Evidence from Vietnam. the journal of Asian Finance, Economics and business, 125.
- Kien Xuan, Q. N. (2020). Effect of Working Capital Management on the Profitability of Steel companies on Vietnam stock exchange. Journal of Asian Finance, Economics and Business, 10.
- Leon, S. A. (2013). The impact of Working Capital Management on Profitability of the listed firms in Sri Lanka. global journal of commerce & management perpesctive , 5.
- Mobeen Ur Rehman, N. A. (2013). DETERMINATION OF THE IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY: AN EMPIRICAL STUDY FROM THE CEMENT SECTOR IN PAKISTAN. aessweb, 14.
- Ojha, P. R. (2019). Working Capital Management and Its Impact on the Profitability of Pukar International Co.Ltd. ncc journal, 7.
- Ramya G, P. P. (2020). Impact of working capital management on profitability in JSW steel limited. sdmimd, 20.



**REFERENCES:**

<https://www.intechopen.com/chapters/78697>

<https://www.emerald.com/insight/content/doi/10.1108/JMB-08-2021-0032/full/html>

<http://www.diva-portal.org/smash/get/diva2:744600/FULLTEXT01.pdf>

<https://core.ac.uk/download/pdf/236407984.pdf>

**ROLE OF FINANCIAL INSTITUTIONS IN THE DEVELOPMENT OF  
EMERGING ENTREPRENEURS – A STUDY WITH SPECIAL  
REFERENCE TO KSFC**

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***Abstract:***

*Entrepreneurs play an important role in the development of the economy by creating jobs through establishing industries and businesses in all geographical areas, thereby promoting balanced regional development and an increased standard of living. However, entrepreneurs, these days face numerous challenges in their enterprises, the most significant of which is the availability of financial resources. The purpose of this study is to know the financial assistance provided by financial institutions to promote entrepreneurs. For a comprehensive analysis of the contribution of Karnataka state financial corporation towards the development of emerging entrepreneurs study covers ten years of data (2012-2022) related to various financial schemes, scheme-wise allocation of funds, growth prospects, beneficiaries' management and so on. The study used CAGR Analysis to find the trend, growth rate and other subsidized facilities towards entrepreneurship development during the study period.*

*The findings of the study highlight that except during covid period in the rest of the years the performance in relation to sanction and disbursement of various schemes and identifying the beneficiaries and reaching the beneficiaries with interest rate subsidies and attractive loan schemes the KSFC performed moderately. Though the institution is taking initiatives by reducing the interest rates and providing new schemes some of the figures are not so attractive. The study concludes that KSFC must come up with new schemes and create awareness among people about the various financial facilities provided by them and manage their NPAs.*

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**Keywords:** Entrepreneurs, Financial Institutions, KSFC, Growth rate, CAGR.

### I. INTRODUCTION:

For all businesses, having access to financing is crucial otherwise, the company would struggle to run its activities. It is regarded as the heartbeat of a company. It serves as an input for various industrial processes, including production, marketing, selling, and distribution. The primary issue for entrepreneurs was finding funding. In the past, their main sources of financing for their firm came from friends and family, as well as private lenders. However, there are currently financial institutions set up by the federal and state governments to financially aid small and medium-sized businesses and entrepreneurs. As is well known, entrepreneurs are crucial to the expansion of a nation's economy. Proper assistance must be given for entrepreneurs to succeed and grow.

Considering this, the Indian government formed SFCs in 1951 to support state-level small and medium-sized businesses. These organisations have been given specific tasks and duties. One among them is the Karnataka State Financial Corporation. Since its creation, KSFC has aided over 174,000 units with a total sanction of over Rs.17,880 crore, with more than 50% going to SSIs, highlighting the state's key role in industrial development. First-generation entrepreneur assistance totalled Rs.7679 crore (42%) for 87129 units. Global giants such as INFOSYS, BIOCON, MTR Foods, BPL India Limited, Sansera Engineering, Reva Electric Cars, 24/7Customers.com, Ace Designers Ltd, and many others began their ventures with the help of KSFC.

### II. Review of Literature:

Gasti, Chandramma .M (2018) In their study on *Analysis of Financial Assistance of KSFC for Development of Entrepreneurship in Karnataka State* have made an analysis of the role played by financial institutions in the development of entrepreneurship with respect to Karnataka state financial corporation (KSFC). The objective of the paper was to examine and analyse the growth in sanctions and disbursements of credits by KSFC and to find out significant variations or changes between the loan sanctioned by the institution across different periods, industries, and schemes. Study was based on secondary data and used statistical tools like two-way ANOVA, independent t-test, percentages, averages etc.

The findings of this study states that the institution has lacked in aiding across the state and has reached only to few backward areas. The arrears of the sanctioned loans have increased during their study period and the recovery rate has been decreased year by year.

The institution only provides financial assistance to the entrepreneur which is a part of their growth but there is a need for technical assistance for the overall development of entrepreneurs.

Srinivas K T (2013) in his research on *The Role of KSFC in Promotion of Enterprises and Employment Generation in Karnataka* tried to explain the functions of KSFC in the promotion of firms, investments made, and their contribution to job creation in the state. The information was gathered from the institution's annual reports, journals, and other publications throughout a six-year period, from 2007-08 to 2012-2013. According to the data, the institution has fostered 166726 entrepreneurs by investing around 12226.27 crores over the last 54 years since its founding, creating approximately 10 lakhs of jobs for the people of Karnataka. According to the study's findings, the institution performed admirably and met the goals. Through the analysis, it is evident that KSFC has contributed significantly by supporting and promoting new businesses in the state.

Prasad Kar (2015) in his work on *Revisiting the Role of State Financial Corporations for Entrepreneurship Finance in India: 'Phoenix' or A 'Swan Song'* highlighted the role of different State Financial Corporations in promotion and growth of entrepreneurship. The objective was to study various practices and schemes or innovations of SFC's towards the growth of micro, small, and medium-scale industries. The authors have selected 10 SFC's of different states and the data has been collected from the annual reports, journals, and audit reports published by the comptroller auditor and general from 2010 onwards for keen observation regarding its financial performance. The analysis explains that the institutions aided only after the commercial banks and mostly to the risky projects and it is not connected to the MSMEs from its initial stage rather it focuses only on providing financial assistance. The authors suggest that the SFC's needs to broaden its operations and needs focus on its structural and operational aspects.

### III. Research gap

Entrepreneurs confront numerous challenges while setting up or launching their own businesses, with financial help from outside sources being the most significant. To meet their needs, the central and state governments have formed SFCs in each state to foster entrepreneurship growth and development. This research focuses on the numerous credit

schemes accessible to entrepreneurs and the trend in the rise of loan sanctions and disbursements for micro, small, and medium-sized businesses.

#### **IV. Scope of the study**

The present study is confined to Karnataka State Financial Corporation only and the study is restricted for 10 years data from 2012-13 to 2021-22.

#### **V. Objectives of the Study**

The present study tries to,

1. Analysis of various loan schemes provided by KSFC for the development of entrepreneurs.
2. Measurement of growth and performance in sanctioning and disbursements of various loan schemes across various periods.
3. To provide suggestions based on study findings.

#### **VI. Methodology**

The present study is purely based on secondary sources. To gather and analyze data regarding KSFC beneficiaries and the various financial schemes, data is gathered from annual reports posted on their websites, journals, and other pertinent papers to analyse and quantify the growth in loan sanctioning and payments. To interpret the gathered data, several statistical methods are employed, such as growth rate, CAGR, percentages, etc. The previous ten years' data, which relates to various credit schemes and various industries, including Micro, Small, and Medium Enterprises, is gathered from year 2012 to 2022.

#### **VII. Limitations**

1. The study is restricted only to the financial assistance provided to MSMEs and small-scale industries.
2. The institution maintains the confidentiality of their beneficiaries.
3. There are few studies/research on state financial corporations and their functioning.

#### **VIII. Results and Discussion**

##### **Scheme-Wise Beneficiaries and Growth Analysis**

The Karnataka state financial corporation provides various schemes to benefit the entrepreneurs of various groups, sectors, and communities to encourage and improve their business skills,

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Improve their standard of living and create employment opportunities in the country or state. Special schemes, such as the single window scheme, schemes for SC and ST entrepreneurs, backward communities, minority communities, and women entrepreneurs, were chosen to examine the growth in the number of beneficiaries and the growth rate in sanctions and disbursements in each scheme over a 10-year period, from 2012-13 to 2021-22.

**Compounded Annual Growth Rate (CAGR):** This is to calculate the rate of change in values over several years.  $CAGR = [(P_1/P_0)^{(1/n)} - 1]$

- **Growth rate:** This is to calculate the percentage of growth in values between two years

$$\text{Growth Rate} = (P_1 - P_0) / P_0$$

- **Average CAGR:** To ascertain the average between two CAGR.

$$\text{Average CAGR} = \text{Sanctions CAGR} + \text{Disbursement CAGR} / 2$$

**Note:** P<sub>0</sub>: Value at the Beginning. P<sub>1</sub>: Value at the End. N: Period

**Table 1- Scheme-Wise Beneficiaries from 2012-13 to 2021-22**

SCHEMES	YEAR WISE NO. OF BENEFICIARIES									
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
SINGLE WINDOW SCHEME	253	200	176	141	123	120	84	48	27	32
Growth rate	-	-21%	-12%	-20%	-13%	-2%	-30%	-43%	-44%	19%
<b>CAGR</b>	<b>-19%</b>									
SC ENTREPRENEURS	208	221	212	297	236	267	263	172	151	138
Growth rate	-	6%	-4%	40%	-21%	13%	-1%	-35%	-12%	-9%
<b>CAGR</b>	<b>-4%</b>									
ST ENTREPRENEURS	78	84	82	107	105	77	91	52	43	42
Growth rate	-	8%	-2%	30%	-2%	-27%	18%	-43%	-17%	-2%
<b>CAGR</b>	<b>-6%</b>									
BACKWARD COMMUNITIES	35	26	21	17	14	32	19	19	13	7
Growth rate		-26%	-19%	-19%	-18%	129%	-41%	0%	-32%	-46%
<b>CAGR</b>	<b>-15%</b>									
MINORITY COMMUNITIES	170	155	89	89	76	73	85	49	33	35
Growth rate	-	-9%	-43%	0%	-15%	-4%	16%	-42%	-33%	6%
<b>CAGR</b>	<b>-15%</b>									
WOMEN ENTREPRENEURS	429	334	273	284	388	429	364	239	147	133
Growth rate	-	-22%	-18%	4%	37%	11%	-15%	-34%	-38%	-10%
<b>CAGR</b>	<b>-11%</b>									

*Source: Data compiled from KSFC operational and annual reports 2012-2022.*

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*Note: The Number of beneficiaries is rounded off to the nearest complete number by considering the decimals.*

The table 1 shows the number of beneficiaries and their growth rate from 2012-13 to 2021-22 for various schemes such as the single window scheme, SC and ST entrepreneurs' scheme, backward community scheme, minority scheme, and women entrepreneur's scheme. The above table shows a 21% decrease in the number of single window beneficiaries from 2012-13 to 2013-14, with a declining trend throughout the period. The greatest decrease in growth rate can be seen in the year 2020-21 (44%) due to the country's pandemic situation.

However, the growth rate increases from (44%) to 19% in 2021-22 as the institution assists the industries by providing interest rate subsidies. SC/ST entrepreneurs have seen both increasing and decreasing trends in beneficiary growth rates. From 2012 to 2013, it increased at a rate of 6% and 8%, respectively, with the highest increase in 2015-16 of 40% and 30%, respectively, and the highest decrease in 2019-20 of (35%) and (43%), respectively, due to covid-19. The Karnataka government has provided grants and assistance to SC/ST entrepreneurs, as well as reduced the rate of interest to 4%, attracting more entrepreneurs. When compared to other schemes, the backward community scheme has the fewest beneficiaries. In the fiscal year 2017-18, this scheme experienced the highest growth rate of 32%. The number of beneficiaries has been decreasing over time due to a lack of awareness, a lack of available required documents, and a lack of understanding of the procedures.

The minority community scheme has the second lowest number of beneficiaries. This scheme has seen a decreasing trend throughout the period, except in 2018-19 and 2021-22, when it was 16% and 6%, respectively, due to a lack of awareness and procedural knowledge, as well as an inability to meet the institution's eligibility criteria. The women entrepreneur's scheme has the highest number of beneficiaries. The scheme has seen both rising and falling trends. From 2012-13 to 2014-15, there is a decreasing trend, after which the growth rate has been increased, with the highest growth rate being 37% in 2016-17 and the lowest growth rate being 38% in 2020-21. Due to the implementation of interest subsidy schemes and many other benefits under these schemes, SC entrepreneurs have recovered their beneficiaries and have the lowest percentage decrease in growth rate among all the above schemes, followed by the ST entrepreneurs' scheme and women entrepreneur scheme.

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**Table 2- Single Window Scheme Sanctions and Disbursements From 2012-13 to 2021-22**

YEARS (Amt in: lakhs)										
	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020- 21	2021- 22
Sanctions	0	4539	4779	4115	3273	3773	2664	1368	877	1454
Growth rate	-	-	5%	-14%	-20%	15%	-29%	49%	-36%	66%
<b>CAGR</b>	<b>-12%</b>									
Disbursements	0	4614	4479	3451	3192	3153	2516	1503	880	600
Growth rate	-	-	-3%	-23%	-8%	-1%	-20%	40%	-41%	-32%
<b>CAGR</b>	<b>-20%</b>									
<b>Average CAGR</b>	<b>-16%</b>									

*Source: Data compiled from KSFC operational and annual reports 2012-2022.*

*Note: The amounts are rounded off to the nearest complete number by considering the decimals.*

The table 2 shows the growth rate and CAGR of sanctions and disbursements under the single window scheme from 2012-13 to 2021-22. The scheme's sanctions have an increasing and decreasing trend. The amount sanctioned increased from Rs 0 to Rs 4779 lakhs between 2012-13 and 2014-15, while the growth rate of sanctions decreased from 5% to 20% between 2015-16 and 2016-17.

The highest decrease can be seen in the year 2019-2020 with (49%) as it was about to reach 50%, but later it has seen the highest increase in the rate in the post-covid era with 66% as many SMEs were affected by the covid and required assistance and many new entrepreneurs came forward by presenting their innovative ideas to the institutions.

The disbursements have been decreasing over time, with the smallest decrease being 1% in 2017-18 and the greatest decrease being (41%) in 2020-21.

There is a disparity between the amount sanctioned and the amount disbursed. The greatest disparity can be seen in 2021-22 when sanctions were 66% and the disbursement rate was (32%).



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**Table 3-SC/ST Entrepreneurs Scheme Sanctions and Disbursements From 2012-13 to 2021-22**

YEARS (Amt in lakhs)										
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Sanctions	9931	11703	11009	21019	24485	28014	34725	18176	16575	16598
Growth rate	-	18%	-6%	91%	16%	14%	24%	-48%	-9%	0%
<b>CAGR</b>	<b>5%</b>									
Disbursements	7263	8075	8638	13585	19568	20461	21522	21060	13615	13793
Growth rate	-	11%	7%	57%	44%	5%	5%	-2%	-35%	1%
<b>CAGR</b>	<b>7%</b>									
<b>Average CAGR</b>	<b>6%</b>									

*Source:* Data compiled from KSFC operational and annual reports 2012-2022

*Note:* The amounts are rounded off to the nearest complete number by considering the decimals.

The table 3 shows the growth rate and CAGR in sanctions and disbursements of the SC/ST entrepreneurs' scheme from the year 2012-13 to 2021-22. The scheme has an increasing and decreasing trend over the period of sanctions.

From 2012-13 to 2013-14 there was an increase of about 18% in sanctions and in 2014-15 there was a decrease in sanctions to (16%). The highest increase in sanctions was in the year 2015-16 with 91% and the lowest sanctions were in the year 2019-20 with (48%) which was in the covid period.

From 2020-21 it has tried to sanction the maximum amount possible. The disbursement has inconsistency in the growth rate but in most of the years, the trend is positive.

The highest growth rate in disbursement was in the year 2015-16 with 57% and the least increase was in the year (35%).

There is a small difference in the sanctions and disbursements which indicates that there are more beneficiaries in comparison with other schemes and a reduction in the interest rates has attracted more entrepreneurs under this scheme.

## Growing Infrastructure A key to Transforming Indian Economy

**Table 4-** Minority Community Entrepreneurs Scheme Sanctions and Disbursements from 2012-13 to 2021-22

YEARS (Amt in lakhs)										
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Sanctions	7910	10007	5127	5733	3668	3982	5715	3841	2945	3634
Growth rate	-	27%	-49%	12%	-36%	9%	44%	-33%	-23%	23%
<b>CAGR</b>	<b>-7%</b>									
Disbursements	6917	8030	6266	3774	4069	3336	3701	5596	2717	2713
Growth rate	-	16%	-22%	-40%	8%	-18%	11%	51%	-51%	0%
<b>CAGR</b>	<b>-9%</b>									
<b>Average CAGR</b>	<b>-8%</b>									

*Source: Data compiled from KSFC operational and annual reports 2012-2022*

*Note: The amounts are rounded off to the nearest complete number by considering the decimals.*

The table 4 shows the growth rate and CAGR in minority community entrepreneur's scheme sanctions and disbursement. The growth rate of sanctions and disbursements has been inconsistent throughout the study period. The highest increase in the growth rate of sanctions was 44% in 2018-19, and the highest increase in disbursement was 51% in 2019-20. The smallest increases were in 2013-14 (49%) and 2020-21 (51%) respectively. The difference in sanctions and disbursements over time is negligible. In comparison to other schemes, the number of beneficiaries is lower.

**Table 5-** Women Entrepreneurs Scheme Sanctions and Disbursements from 2012-13 to 2021-22

WOMEN ENTREPRENEURS SCHEME										
YEARS										
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Sanctions	29913	22596	19599	22580	24866	31882	41365	21142	11928	13940
Growth rate	-	-24%	-13%	15%	10%	28%	30%	-49%	-44%	17%
<b>CAGR</b>	<b>-7%</b>									
Disbursements	23359	20818	16926	18599	13646	19556	29625	29188	16778	11562
Growth rate	-	-11%	-19%	10%	-27%	43%	51%	-1%	-43%	-31%
<b>CAGR</b>	<b>-7%</b>									
<b>Average CAGR</b>	<b>-7%</b>									

*Source: Data compiled from KSFC operational and annual reports 2012-2022*

*Note: The amounts are rounded off to the nearest complete number by considering the decimals.*

The table 5 shows the trend in the growth rate of sanctions and disbursements of the women entrepreneur's scheme from 2012-2022. From 2012 -13 to 2013-14 there is a decrease in sanctions and disbursement by (24%) and (11%) respectively. From 2015-16 to 2018-19 there is a growth in sanctions and the highest being in 2018-19 with 30%. In the year 2019-20 and 2020-21, there is the highest decrease in the growth rate of sanctions with (49%) and (44%) respectively due to the pandemic, as the sanctions were restricted during the period. There is a growth from (44%) to 17% in 2021-22, as it was post covid when most entrepreneurs needed financial assistance, and the institutions tried to reach a larger number of beneficiaries. During the study period, the growth rate of disbursement was inconsistent. The highest increase was 52% in 2018-19, and the lowest increase was 41% in 2020-21. The sanction and disbursement CAGR are (7%), indicating that there is no disparity in the amount sanctioned and disbursed during the study period.

### **IX. Findings and Suggestions**

1. According to the analysis, the SC entrepreneurs' scheme had the highest number of beneficiaries during the study period, with a CAGR of (4%), followed by the ST entrepreneurs' scheme and the women entrepreneur's scheme, with CAGRs of (6%) and (11%), respectively. It could be because of the appealing packages offered to them and the reduction in interest rates to 4%.
2. The single window scheme had the fewest beneficiaries during the study period, with a CAGR of (19%), followed by the minority community scheme and the backward community scheme, both with (15%). It could be because of unappealing offers or an inability to meet the institution's requirements.
3. The least growth in the beneficiaries under all the schemes was during 2019-2020 and 2020 -21 due to the pandemic situation in the country.
4. The growth rates in sanctions and disbursement have shown an increasing and decreasing trend across all schemes, with SC/ST entrepreneurs showing the highest growth with CAGRs of 5% and 7%, respectively, and the average CAGR being 6%, implying that the disparity between sanctions and disbursement is not that significant with 2%.

5. The women entrepreneurs' scheme also performed well during the study period, with a CAGR of (7%) in both sanctions and disbursements; the average CAGR is also (7%), indicating that there is no difference in sanctions and disbursements; however, the figures are not particularly appealing. It is suggested that the institution expedite the process of implementing the schemes and their interest rate decisions.
6. The single window scheme had the lowest growth in sanctions and disbursements, with an average CAGR of (20%), and it had a significant difference in sanctions and disbursements during the period, followed by the minority scheme with (8%). Karnataka government, the institution should try to add more benefits to these schemes.
7. To help boost the confidence of business owners, the institution might try to make the loan application process simpler and offer help in other areas as well.
8. Since most of the firms obtain loan for new projects, the corporation should extend the loans to innovative and economically viable projects.

### **X. Conclusion:**

KSFC has performed moderately during the period and has tried to reach a good number of beneficiaries through its special packages and through interest subsidies with the support of the state Government. From the study, it can be noticed that there is growth with regard to the financial assistance provided by the institution to the selected entrepreneurs specifically mentioning the scheduled caste, scheduled tribe and women entrepreneur's schemes.

The Backward community scheme, minority scheme and single window scheme have the least CAGR and their growth rate is decreasing year on year, it can be due to less attractive packages available to this category of entrepreneurs or due lack of awareness regarding the various financial facilities offered by the institutions, lack of procedural knowledge or the inability to meet the eligibility criteria and their enterprises may not perform well which leads to a reduction in their sales, profit and working capital and ultimately causing to shut down their businesses. Though the institution is taking initiatives by reducing the interest rates and providing new schemes some of the figures are not so attractive. The study concludes that KSFC must come up with new schemes and create awareness among people about the various financial facilities provided by them and manage their NPAs.

### Reference:

1. Abhay Kumar Gasti and Chandramma M (2018). *Analysis of financial assistance of KSFC for the development of entrepreneurship in Karnataka state*. Pacific Business Review International, Vol.11, Issue 4, PP. 40-48.
2. Anonymous (2015). *Karnataka agribusiness and food processing policy with special Referenceto Hyderabad Karnataka region*. District Industrial Corporation, news report. Vol. 6, Issue 3, PP.21-22
3. Ashish Kuamr Sana and SusantaKanrar (2009). *Role of State Financial Corporations in The Development of Micro, Small and Medium Enterprises: A Study with Special Reference to West Bengal Financial Corporation*, Business Studies Vol.30, PP.100-116.
4. Brajaballav Kar and Shyama Prasad (2015). *Revisiting the role of state financial corporations for entrepreneurship finance in India: 'phoenix' or a 'swan song'*, Siddhant- A Journal of Decision Making, Vol. 15, Issue 1, PP.32-39.
5. R. Jayanthi (2019). *A Study About Entrepreneurship in India and Its Promotion Under 'Startup India' Scheme*, Iconic Research and Engineering Journals, e-ISSN: 2456-8880, Vol. 2 Issue 11.
6. Eng Yi Fong et.al. (2020). *Challenges Faced by New Entrepreneurs and Suggestions How to Overcome Them*.  
[https://www.researchgate.net/publication/346200904\\_Challenges\\_Faced\\_by\\_New\\_Entrepreneurs\\_and\\_Suggestions\\_How\\_to\\_Overcome\\_Them](https://www.researchgate.net/publication/346200904_Challenges_Faced_by_New_Entrepreneurs_and_Suggestions_How_to_Overcome_Them)
7. GudataAbara and Tadele Banti (2017). *Role Of Financial Institutions in The Growth of Micro and Small Enterprises in Assosa Zone*, Research Journal of Finance and Accounting, ISSN: Vol.8, Issue.3.
8. Hiregouda Nagaraj,B.S. Reddy,D.G. Satihal (2017). *Impact of Karnataka State Financial Corporation on Micro, Small and Medium Enterprises Development in Karnataka*, Indian Journal of Economics and Development, Vol. 5, Issue 4, ISSN:2320-9836.
9. <https://ksfc.karnataka.gov.in/info>
10. Lachhman Singh Rawat (2017). *The Role of SFCS In the Industrial Growth of The States with Special Reference to Delhi Financial Corporation*, International Journal of Management and Applied Science, ISSN: 2394-7926. Vol.3, Issue.8.

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11. Laiqh A. Khan (2016).*Make use of KSFC loans, women entrepreneurs told*,<https://www.thehindu.com/news/national/karnataka/make-use-of-ksfc-loans-women-entrepreneurs-told/article8255883.ece>
12. MisalDilip M (2016). *Role Of Financial Institution and Commercial Banks in Entrepreneurship Development in India*, International Journal of Economics and Business Modelling, Vol. 7, Issue 1, PP.-265-267.
13. Ms Indira Kumari (2014). *A Study on Entrepreneurship Development Process in India*. Indian Journal of Research, ISSN - 2250-1991, Vol.3, Issue 4.
14. Ms. Shweta Dahale et.al. (2015). *Critical Analysis of Role Played By Financial Institutions In Development of Indian MSMEs*, IJRSI, Vol. II Issue. III, PP-58-64.
15. Sweety Gupta and Aanchal Aggarwal (2015). *Opportunities And Challenges Faced by Women Entrepreneurs in India*. IOSR Journal of Business and Management (IOSR-JBM) Vol. 17, Issue 8.Ver. III (Aug. 2015), PP 69-73.

**A STUDY ON THE EMPLOYEES' PERCEPTION ON FEAR OF JOB LOSS  
WITH SPECIAL REFERENCE TO THE AUTOMOBILE INDUSTRY**

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**ABSTRACT**

Job plays a significant role in people's lives. It includes more than merely receiving payment. It includes freedom to decide for oneself how she/he wishes to conduct their life. By reassuring that one can be supported by one, work enables one to feel proud and satisfied of oneself. Employment prospects, employability, personal qualities, and family responsibilities are only a few of the variables that affect how people respond to the continuously changing aspects of work conditions.

Ergophobia is a persistent, abnormal fear of work or the prospect of obtaining or losing a job. The study aim is to critically evaluate the relationship between employees fear and skill required to grow in their respective job roles.

To explore the reasons why employees have fear of job loss while working in the firm to look at methods for lowering staff turnover however the organization has to spread their hands further in providing assistance after a job loss, leaders have a great responsibility and power to help their team members or employees. The present conceptual study highlights employees feel appreciated and confident about chances in the future if they have a leader that is on their side and supporting for them.

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**Keywords:** *Employment, Employability, Ergophobia, Skill requirement.*

### **1. INTRODUCTION:**

Job plays a significant role in people's lives. It is important element for any individual (he/she) to lead a peaceful life in the society. And to pay all the bills which are necessity to run the livelihood. Employment prospects, employability, personal qualities, and family responsibilities are only a few of the variables that affect how people respond to the continuously changing aspects of work conditions. The dread of losing one's job stems primarily from the expectation of an unwelcome employment change or move that would affect continuity or security.

Compared to individuals who were actually laid off, those who worried about losing their positions frequently reported worse physical condition and greater signs of sadness this implies that job loss itself may not even be worse than the fear of it. Different people may react differently when they believe their employment is in danger. The employment market is more highly competitive in a whole new way.

Employers today consider employability skills to be crucial qualities in potential employees, along with subject material competence. The proliferation of start-ups made it simpler for IT specialists to acquire employment, but now many of them are struggling to maintain their employment or succeed in their positions. The dynamic nature of technology is one factor in this. Every day, technology changes, and if you don't stay up to date to stay competitive in your field, you will inevitably lag behind your colleagues. The fact that businesses are emphasizing the value of "employability skills," or abilities that go beyond education and experience, is another factor contributing to the difficulty that many people are having in successfully launching their careers. There is a growing perception that long-term connections between companies and employees are a feature of the past as a result of the dramatically changing labor market.

The reduction of permanent employees through factory closures and layoffs as a result of economic recessions, the industry transition from manufacturing to service industries and increasing global competitiveness has recently added to concern regarding job security. The effects of perceived work instability have drawn more public and academic attention, and a small number of researchers have found a detrimental relationship between perceived job insecurity and health in a range of organizational and national contexts.

The fear of job loss refers to the feeling of threat, tension, and perceived helplessness brought on by the possibility of quitting the present job and not finding work in the labor market is referred to as the fear of losing one's job. Fear itself causes anxiety and negatively affects the wellbeing



of both employees and even their dependents. An individual with a phobia is someone who has a persistent fear of something that is greater than the threat that it truly poses. This condition is caused by a person's need to be on high alert all the time and steer clear of the phobia's triggers, which causes psychological anguish. Phobias can be generic to social contexts or specific to a particular trigger.

Exposure therapy is the most effective method for treating phobias. Ergophobia, also known as ergasiophobia or ponophobia, is a persistent, abnormal fear of work (including manual labor and other types of work) or the prospect of obtaining or losing a job. It is recognized as a sort of social phobia, performance anxiety, and professional burnout that results from a persistent sensation of pressure or unreasonable expectations at work.

Ergophobics have unreasonable concern about their jobs and their working environments. For instance, fear of bodily harm, performance anxiety related to public speaking at work, social phobia related to mingling with coworkers, and fear of failure at assigned duties are all examples of performance anxiety. The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) does not provide a detailed definition of ergophobia. Nonetheless, the manual's section on "Specific Phobia" contains the requirements for meeting this diagnosis.

According to the phobia's theme, the DSM-5 offers extra specifics in addition to its seven diagnostic criteria. Ergophobia satisfies one requirement because it results from a "Situational" phobic stimulus. An inspirational success story is the Indian auto industry. It has become a bright spot in the last forty years, catalyzing India's gross domestic product as well as the country's whole economy. The worldwide consulting firm McKinsey designated the automobile industry to be among India's key sectors, estimating the production of automobile parts to be reportedly worth to 12 % of a Gross Value Added in the manufacturing.

The car industry, one of the main economic drivers, accounts for around 49 percent of India's manufacturing GDP and percent of total of the country's overall GDP. The value chain in the car industry supports 32 million employments. The industry, which is expected to generate 65 million employments by 2026, has experienced numerous setbacks since the Corona virus epidemic first broke out.

The Indian automotive sector is being affected by a number of issues, including a shortage of chips, repeated and identical bookings, rural misery, fuel price-driven inflation, a sharp increase in commodity prices, a shortage of containers, and rising logistical expenses.

### 1.1. BENEFITS OF WORKING IN AUTOMOBILE INDUSTRY:

**1. Working in Automotive Production Is a Skilled Job:** Ford and other automakers need their employees to have college degrees because the industry calls for a lot of expertise and aptitude. Many of the roles at a car manufacturing factory demand workers with analytical analysis and problem-solving skills, even though some may involve repetitive tasks. The work will undoubtedly be difficult.

**2. It Typically Pays Well:** Most automakers give their employees good wages. All employees are often paid a respectable income, while full-time positions are sometimes regarded as the most prestigious due to their generous benefits packages.

Generally speaking, the manufacturing sector pays higher wages than the retail, restaurant, and customer service sectors. The reason is that they require experts who can critically think and solve difficulties. There is also a lot of training and safety and other stuff to think about. Automakers want intelligent, talented personnel. They are prepared to offer competitive salary in order to attract them.

**3. There Are Plenty of Job Possibilities:** There are busy periods and slow times since just-in-time production is now the norm in most manufacturing. The lean production technique was invented by the auto industry in North America, and it is still used by them today. Numerous employees will be recruited during peak periods and subsequently fired or dismissed during slow periods. Yet, there are generally always possibilities for employment in the business if you perform well.

When the next moment of high output comes along, talented and skilled people are more likely to get their jobs back. You might be given consideration if a full-time role or another position becomes available. Basically, car companies are always in need of workers, and they try to find strategies to keep their best employees coming back.

**4. You'll get Useful Skills:** As was already established, employment in the auto industry involves more than just "pressing a button." This is one of the reasons automakers require talented and skilled workers, but it also means that you, the employee, have many opportunity to develop and should have important abilities. Anything from improved scheduling to critical and analytical abilities can be learned. Among other workplace skills, you'll undoubtedly study about health and safety regulations. You would have acquired the abilities necessary to succeed in practically any other field after operating as an employer in the auto manufacturing sector.

### 2. REVIEW OF LITERATURE:

Andy Dickerson and Francis Green(2006) A study by Andy Dickerson and Francis Green examines the relationships between expectations and realizations of job loss, focusing on representative samples of German and Australian workers drawn from the German Socio-Economic Panel as well as the Household Income and Labour Dynamics in Australia Survey, respectively .The data provide sensitive information about the risk of losing one's job, as demonstrated by both the raw data and standard panel estimators, making the collection of subjectively anticipation data on job loss important. Employees in both nations typically overestimate their likelihood of losing their jobs by a ratio of about two.

The measurement of labour market agents' expectations has the potential to be useful as a tool for evaluating a variety of employment market behaviour. Because this is a key component of the broader idea of work insecurity, we have chosen to concentrate on the anticipation of loss of jobs. There is a strong argument in favour of adopting questions that unequivocally capture this risk without equating it with potential outcomes. Because it creates ambiguity, conflation with other associated risks decreases the credibility of the instrument. Additionally, it is well known that some respondents who are asked to estimate the combined risk of two dangers are susceptible to the conjunction fallacy.

R. David Lebel (2016) other study by David explains that often believed that fear severely restricts employee speech, a functional perspective on emotions implies that different people react differently to dread. I contend that this connection may be more nuanced than the widespread belief that fears is inversely correlated with voice. I propose the functional perspective of emotions, which holds that employee voice may be positively correlated with anxieties from external sources that focus attention on a shared threat to the firm. This effect is probably contingent workers are encouraged to speak up when they believe their managers are open to suggestions.

Thus, views of a supervisor's openness can encourage employees to share information rather than use it for their own selfish ends. Two research' findings imply that when workers believe their supervisors are open to their ideas, voice is positively correlated with fear of external threat. Furthermore, the findings imply that this interactive impact is mediated by prosaically incentive, which encourages workers to speak up when they perceive an external threat.

Gordon L.Clark (2022) a research work by Gordon tells that people's assessments of their circumstances and subsequent actions are rooted in both time and place. However, context only tells half the tale. Humans all have a tendency to priorities the present moment, discount the future, and avoid taking risks. With an emphasis on agency, resources, risk, and volatility in European labour markets, this study offers a methodology for combining cognition with environment in economic geography.

By doing this, it aims to avoid essential zing the individual while making sure that the final framework does not reduce people to mere symbols of their respective eras. Individuals' assessments of the effects of technology progress on their career aspirations in a multicounty European scenario are used to demonstrate the concept.

Policy-relevant conclusions are drawn for a behavioural economic geography. The fundamentals of decision-making in time and space were laid forth, and they applied to the threats to employment and income posed by the technological revolution. The context of each decision-maker was examined, starting with situations where people look ahead from their present position to imminent prospects (risk) and to the long-term, which is challenging to understand in terms of its anticipated repercussions (uncertainty).

Experience matters in the first situation, whereas it is at best a faulty behavioural guidance in the second. Researchers frequently conceptualise these problems by weighing the costs and advantages of various solutions; in this work, the emphasis is on people's "self-perceived threats" to their livelihoods.

Leonidas A. Zampetakis (2022) The study aim is to comprehend how public sector workers who report to work to carry out important societal and economic tasks deal with their dread of COVID-19 and preserve their drive, vigor and excitement for their work. Our hypothesis was that a rise in daily risk of COVID-19 would be associated to an increase in daily job crafting behaviors, which would then be related to employees' daily motivation since employees are driven to safeguard their health. The third wave of a COVID-19 virus (March 2021) was experienced by 64 tenured employees employed by the public sector organizations who performed a statistical diary for 5 successive workdays.

### 3. RESEARCH METHODOLOGY:

#### 3.1. STATEMENT OF THE PROBLEM:

In today's Globalization, as resources are redistributed, economic change generally results in some people losing their jobs. Production is moved across borders by globalization, but labor cannot follow as easily. If the change is long-lasting, which is referred to as structural unemployment, it may lead to long-term unemployment.

Globalization of the economy has an impact on the amount of jobs that exist in various nations and industries. Consumption has expanded as a result of economies' economic expansion, and eventually so has the demand for goods and services. Productivity and job opportunities have increased dramatically as a result of globalization. This is evident through changes in an economy's unemployment rate and employment-to-population ratio.

In parallel, globalization has boosted competitiveness between nations and businesses, which frequently leads to closures, outsourcing, and job losses. The industries that is primarily reliant on low-skilled labor, such as those that produce textiles, apparel, footwear, and leather goods, as well as basic metals and manufactured steel industries and manufacturing, are the most susceptible sectors that fall into this category.

The manufacturing industry is especially vulnerable to outsourcing because of rivalry from nations with low wages. Sometimes the competitive side of globalization affects people in a given category rather than specific industries. The form and makeup of these professions varies greatly from one place to another, notwithstanding the overall good effects of global liberalization and technological advancement. Undoubtedly, certain industries have suffered. The distribution of the shift in the amount of available positions is also not consistent.

Fear of job loss should be reduced among the employees and retain the employees in the organization for long run. It builds trust between the company and among employees. That phobia should be reduced among the employees and develop their skills required at their particular job role. This study goal is to measure the fear of job loss among the employees in Automobiles sector. The Present study has been carried out into 2 parts they are namely as conceptual paper and Empirical study.

### 3.2. OBJECTIVES OF THE STUDY:

The objectives of present study on:

1. To explore the reasons why employees have fear of job loss while working in the firm
2. To study the methods followed by management for lowering staff turnover.
3. To study the relationship between employee fear for job loss and skill required to grow in their respective job roles.

### 3.3. RESEARCH DESIGN:

The present paper is descriptive in nature and secondary data has been collected and this is Conceptual paper

### 4. Discussion:

**The following questions emerged and answered or discussed as follows:**

#### **4.1. How to handle losing a job apprehension towards automation/Methods for lowering staff turnover by management?**

To assist your team members feel more at ease working beside software-powered machines and automatons, remember the following three guidelines.

##### **1. Stress the importance of problem-solving:**

Both inexperienced workers and seasoned pros must concentrate on identifying and expressing concerns. Intelligent information devices are already outperforming people in solving well defined problems. However they are unable to identify and frame issues that have not yet been identified; this is a human-only ability.

In order to encourage creativity, curiosity, and inquiry in children from an early age, educational institutions, which are sometimes constrained by strict curricula designed to teach information about predetermined answers, must change their approach.

Similar to this, businesses should seek to create an innovation culture and training initiatives like design thinking seminars that encourage staff members of all ranks to become problem solvers.

Despite automation, employees who show action in looking for new markets to expand into and providing value will concurrently upgrade their abilities and boost their chances of getting promoted in their careers, according to a WEF (World Economic Forum) study in which 94% of corporate executives surveyed stated they anticipated their employees to pick up new skills on the job.

### **2. Retraining for survival:**

Being employable is the most effective method of discovering work, even as more occupations are mechanized. Workers will need to acquire new skills and reskill to start climbing as the quarter of jobs is rapidly decreasing across industries (particularly at junior levels).

In a normal career, this will occur more than once, transforming workers into life - long learning who are always learning new things in small doses. A one-size-fits-all approach will never be successful because every employee will have different learning demands in terms of material, timing, intensity, and duration. Instead, each employee should have the freedom to choose how they will learn. Modularized, individualized, micro learning will be made available at scale through digital platforms like Udemy, Coursera, Google Career Certifications, and others.

### **3. Training for all:**

The fact that too many individuals lack access to digital training is one factor contributing to the wide-spread skills shortage in our economy. Policymakers, educational establishments, and business executives must collaborate to democratize education in order to address issue. Making higher education more accessible will enable even individuals from less privileged families to take advantage of it.

Digital learning platforms can be useful in this field as well because of their adaptability and accessibility. Companies can increase the diversity of their talented employees by hiring people with non-STEM (Science, Technological, Engineer and Mathematics) degrees, hiring people based on abilities rather than just degrees, and hiring people from underprivileged and marginalized backgrounds. Companies should work to develop a culture of lifelong learning, which includes job rotation and training/apprenticeships, to get ready for this and make sure that their staff is better prepared for a digital future.

### 4.2. How to Get Rid of Your Job Loss Fear?

It's crucial to make an effort to lessen the negative effects fear has on your health because it can stress you out and produce physical symptoms. By dealing with your fear of losing your job, you can eliminate a barrier to your performance and practice productive, long-term professional behaviors like:

**1. Taking high-reward risks:** When you are less afraid, you are more inclined to accept challenges that could increase your visibility to your employer and lead to praise and professional advancement.

**2. Forming bonds with coworkers:** When there is less fear, your coworkers may feel more a part of the team and happier. This upbeat outlook can impact advancement and help one gain more respect inside the company.

**3. Pursuing ambitious chances:** Letting go of one's anxiety in the workplace might give you the guts to explore better job opportunities, either inside your company or elsewhere.

Early intervention can help you channel your anxiety about forfeiting your job into productive actions like working hard and projecting confidence. Both of these traits have the potential to raise your status within the company.

### 4.3. How to get over your fear of being fired from your work (While working in the firm)?

We don't have to let fear of losing one's work rule individual. In truth, one can take proactive steps to overcome it and live a happier, healthier life. To get over fear of losing one's job, follow these steps:

**1. Self-evaluation:** Identifying if he/she has a fear is justified is the first step in conquering it. Consider if there's any proof that one might lose one's job. For instance, one might have manager aversion, a reduction in one principal duty at work, or a request from one employer to teach subordinates in their primary responsibilities. If there are no good reasons to be frightened, take it easy and do their best to support the organization.

**2. Consult with your boss:** If he/she discover that one have good reasons to be concerned about losing their job, think about talking to the manager or a higher-up about what one can do to make



oneself a more valuable asset to the company. One may, for instance, inquire as to the jobs that must be completed and the best ways to boost output. This can demonstrate their commitment to the work while also providing one with practical advice on how to increase their job security.

**3. Encourage positivity:** Positive thinking acts as a bulwark against fear. It can assist individual in reducing their stress and concentrating on the positive aspects of one's life. There are methods one can do to improve their ability to remain optimistic. A thankfulness journal is a type of diary where one's chronicle things that happen to one for which they are grateful. Because it serves as a constant reminder that one deserve and are capable of good, a thankfulness diary can help you overcome pessimism and increase individual self-confidence. Positive thinking has the potential to boost both productivity and relationships among coworkers. They can increase their job stability and help to further lessen the anxiety-inducing factors.

**4. Establish yourself:** Try to focus one's effort on being productive rather than worrying. In addition to having a happy attitude, one may help their company by offering to assist coworkers with their work, managing his/her workload well, and requesting hard assignments that will enable one to participate more effectively to the objectives of the company. The employer may recognize individual employee's value and desire to maintain them as a worker if they demonstrate that they are diligent and trustworthy asset. Keep in mind that individual work ethic should reflect a professional way of life. It must produce a long-term sustainable result rather than merely a quick fix. Choose the best possible version of oneself for the workplace, and work to become that person.

**5. Prepare proactively:** Being concerned about losing one job indicates that one are aware of the possibilities. This is sincere, and it might even be good for one if it spurs one on to make preparations for a difficult situation. Consider creating an individual economic plan while one are still employed to safeguard them in case individual can experience a time of unemployment. The strategy might be as straightforward as setting aside a portion of each paycheck for savings or it can involve investing. In any event, the goal is to amass enough money to support a full-time job hunt.

Knowing that one had this economic security net will assist lower his/her worry regarding being unable to fulfill their monthly bills and hence mitigate one from dread of job loss.

### **4.4. A. The following are some causes of job loss fear (Individual fear):**

There are certain similar worries among those who dread losing their job, even though the causes that lead to one worry of losing their employment may not be identical to those experienced by others. They consist of:

#### **1. Personal costs:**

Having a job enables one to pay for expenses like rent or mortgage, car payments, bills, and groceries. It is fair to be concerned about the risk of losing the money one can spend to pay for things because they are necessities for life. It's helpful to think about what one can do right now to create a bright future because when one concentrates on this fear, one could become locked into anticipating the worst-case scenario.

#### **2. Stress associated with seeking for or beginning a new job:**

Someone could prefer to continue working at their existing position than begin a new one for a variety of reasons. Many workers are concerned about changing their careers and entering into novel duties and new connections because they appreciate their jobs, their coworkers, and the work environment. In this situation, it may be beneficial to consider potential future work options and to be open to new experiences.

#### **3. Uncertainty regarding potential outcomes:**

Many people are grateful to have a job, but they are unaware of what valuable traits they may offer prospective employers. Imposter syndrome is the term for these self-doubt phenomena, which is the conviction that your successes are mostly the result of luck. Try to consider his/her past as a way to overcome this. One's qualifications are demonstrated by all of their professional and educational accomplishments, important relationships, and favorable impressions on other people.

### **B. Employability Skills requirement:**

According to STEMNET (Science, Technology, Engineering, and Mathematics Network). Employability skill are the individual knowledge, abilities, and attitudes, as well as how one use them and how one show them to companies in the modern workplace, all have an impact on their employability. To be successful in the majority of employment in the field of new technologies,

one should require soft abilities such as interaction, collaboration, and problem-solving. Today, his/her degree and expertise may only be sufficient to qualify for a job. Employability skills are another name for these soft talents that will enable one to perform their job in the organization to a best of their ability. These abilities, which are the foundation of any profession, are what enable one to find employment across a range of positions, markets, and industries. Because they are significantly more difficult to teach, employers typically seek proof that one already possess these soft skills when hiring he/she.

In essence, these sets of employment skills are behaviors that are required for all jobs and are crucial attitudes that allow one to advance in their profession and effectively assist him/her:

Make responsible decisions for their career and livelihood, establish relationships with coworkers, solve difficulties, and know their place in the team. Be autonomous and take responsibility of their career.

One's interactions with other people are influenced by their personal traits, routines, and attitudes. Employability skills are important to employers because they show how well one get along with coworkers and clients and how well one will manage their job success and professional achievement.

These distinct qualities are valued by employers in their prospective employees since they remain essential for a successful workforce. Businesses invest a lot of effort and money in fostering these fundamental and job-ready abilities. Employers today have more choices and would prefer to recruit a technical specialist who also demonstrates a wide range of employability abilities in a world where employment are scarce.

### **5. CONCLUSION AND FUTURE STUDY:**

The aim of the organization is to reduce the fear of job loss among the employees and regularly train them to enhance their skills as per current market standards, to motivate them by rewarding them by monetary and non-monetary rewards, encouraging individuals who are ready to upskill their knowledge in their particular job role, building trust among employees.

In spite of many efforts from organisation completely they cannot erase fear of job loss among employees because that is related to individual employee's psychological element or belief system. However, the organisation has to spread their hands further in providing assistance after a job loss, leaders have a great responsibility to help their teams members or employees. An employee may feel

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appreciated and confident about chances in the future if they have a leader that is on their side and is rooting for them. If downsizing is a consideration, reassure your staff that you will support and mentor them by providing them with resources, introductions, and recommendations from your network.

A Future study will be carried out as empirical study where employees will be personally interviewed and questionnaire will be distributed among employees. So further light on this paper will be studied in particular automobile company in bengaluru city.

### **REFERENCES:**

1. Garg, C. R. Research Methodology-Methods and Techniques.
2. Aswathappa, K. (2010). Human Resource Management.
3. Bhatia, D. Compensation Management. HPH.
4. Dhar, R. L. Strategic Human Resource Management.
5. Sharma, E. Strategic Human Resource Management and Development.
6. Clark, G. L. (2022). Agency, sentiment, and risk and uncertainty:fears of job loss in eight european countries.
7. GREEN, A. D. (2006). How should we measure the fear of job loss?
- 8 .R.David. (2016). Overcoming the fear factor: How perceptions of supervisor opennesslead employees to speak up when fearing external threat.
- 9.Zampetakis, L. A. (2022). Employees' fear at work, job crafting and work engagement on a daily basis: The case for fear of COVID-19.
10. Kelley, K. (2023). Why are Employability Skills Important.
11. D.R., B. (. (November 4, 2021). Automation: 3 ways to ease job loss fears.
12. Team, I. E. (December 10, 2022). How To Overcome Fear of Losing Your Job.
13. Education, P. D. (2018). The Importance of Employment: Why Work?

# Growing Infrastructure A key to Transforming Indian Economy

## Public and Private Transportation Systems

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### Abstract

India is one of the fastest-growing economies in the world. To sustain this growth, the country must have an infrastructure that is capable of supporting it. Transportation systems play a crucial part in this infrastructure, and both public and private transportation systems have a vital role to play in transforming the Indian economy. In this article, we will look at the various factors that have led to the growth of transportation in India, the infrastructure required to support the transport system 10 years from now, and the policies of the government that will help in achieving this objective.

### Factors influencing the growth of the Transport Industry

Transportation in India has grown by leaps and bounds in the past 20 years. The reasons for the evolution of the transportation system in India can be attributed to the below-mentioned factors.

Scale	Environmental	Historical	Technological	Political	Economic
 Local	Hydrography and geomorphology	Culture and settlement patterns	Roads	Zoning	Employment and distribution
 Regional	Climate	Urban system	Railways and canals	Taxation and regulations	Modal competition and complementarity
 National / Transnational	Distance	Nation state / Colonialism / Imperialism	Corridors and sea routes	Trade agreements	Markets

**Keyword:** Public, and Private, Transportation, Environment, Technology.

### **Introduction:**

The development of transport systems depends on the physical features of land areas and bodies of water adjacent to them. It also depends on the landforms and how the landforms have developed due to the forces acting on the earth's surface. The climate is yet another important aspect that conditions transportation operations. At the national level, the distance underlines the geographical scale to be considered.

1. **Historical Factors:** Most of the civilizations in the past flourished on the banks of rivers. Settlement patterns and cultural attributes influence the local transport system. The historical process of Colonialism and Imperialism which started with trade as the main occupation has given rise to the development of a national transport system. Urbanization is one of the primary factors and drivers for the growth of a well-connected transport system.

2. **Technological factors:** There is a matching scale of development for each transport technology. The adoption of newer, faster, and eco-friendly means of transportation has given rise to energy-efficient and eco-friendly fuels which power the transportation system. Corridors are mainly rail routes and highway networks which are built to connect different places in the shortest available time.

3. **Political Factors:** Transport development is a process that is managed and regulated. Zoning is a method of urban planning in which a municipality or other tier of government divides land into areas called zones. It is the regulatory framework that influences the most transport development. Taxation and regulations such as safety and operating conditions are political aspects that play at the regional and the national levels. Trade agreements have an important implication, linking neighboring economic entities, which has influenced transportation development with an attempt to coordinate physical and trade networks.

4. **Economic Factors:** Economic processes shape transportation development since its purpose is to support economic activities. The more advanced an economy is, the more intensive and efficient transportation systems are. Employment and distribution are drivers focusing on a network of transport systems for people and the distribution of final goods. Transportation modes compete in service markets. The outcome of this competition is a well-distributed transport system.

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### 1. Public and Private Transportation in India:

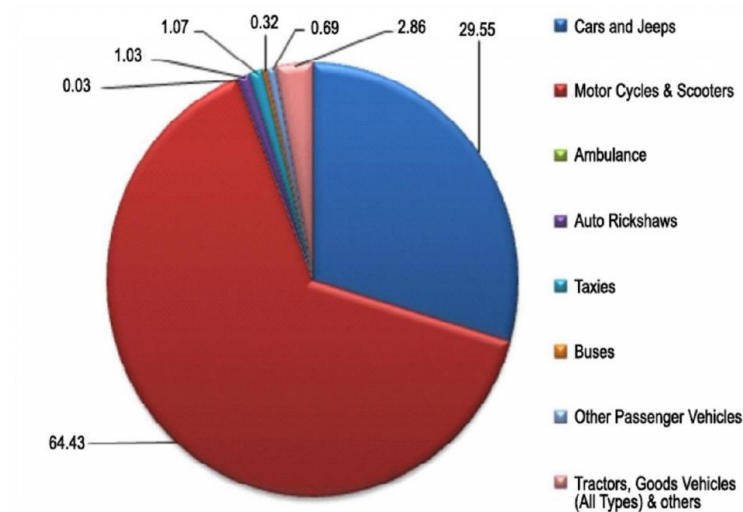
These factors have led to the growth of Public and Private Transport systems in India.

#### Public Transportation System in India:

Public transportation is a public transportation system provided by the government or public agencies. Public transportation in India is an essential mode of transportation for millions of people who cannot afford private transportation. The public transportation system in India includes buses, trains, and metros. The most commonly used mode of public transportation is the bus system.

#### Private Transportation System in India:

Private transportation refers to the transportation system which is owned and operated by individuals or private companies. The private transport system in India includes cars, taxis (traditional taxis, app-based taxis, and luxury taxis), and motorcycles.



The percentage distribution of the sales of different private and public transport vehicles and their usage in India is given above. The above graph indicates the Automotive market in India. Two-wheelers and passenger cars account for 76% and 17.4% market share, respectively.

### 2. Transport Scenario by 2030

India is expected to be the world's third-largest automotive market in terms of volume by 2030. There will be around 150 million shared cars on the road by 2030.

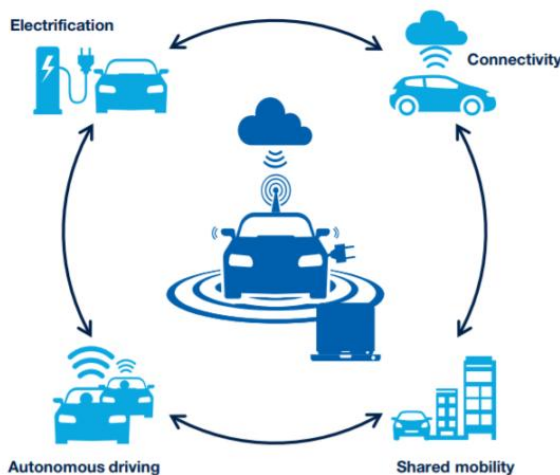
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The megatrends have suggested that the growth of the Indian Automotive Industry will happen in the below areas

- Connectivity
- Autonomous driving
- Shared Mobility
- Electrification



The major disruptive technologies will be implemented through Intelligent transport systems (ITS) driven by Industry 4.0, data analytics, IOT, and artificial intelligence from Hyper-loop to autonomous and remotely piloted vehicles.

### 4.1 Electrification:

The majority of vehicles on the road will be zero emissions by 2030. With an increase in population and an increase in pollution levels, traditional transport will cause more harm. Also, the deterioration of fossil fuels will cause a steep decline in the sale of petrol and diesel vehicles.

A feasible way to achieve zero emissions in transport is to electrify vehicles using renewable energy. Battery-powered electric vehicles will make this happen. Battery technology will continue to improve as battery chemistry develops. Hydrogen fuel is a promising alternative to traditional fossil fuels because it produces no emissions when burned, only water vapor. It can be manufactured using a variety of renewable energy sources, such as wind and solar power, and can be used to power vehicles, generate electricity, and heat buildings. While hydrogen fuel



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technology is still relatively new and expensive, it has the potential to become more efficient and cost-effective in the coming years.

Other alternative technologies that could play a role in the clean energy transition include solar, wind, and geothermal power, as well as energy storage systems like batteries and pumped hydroelectric storage. These technologies have already made significant progress in recent years, and are likely to continue to improve in efficiency and cost-effectiveness.

### 4.2 Autonomous vehicles:

Autonomous electric vehicles will become the norm of transportation in ten years. The technology to deploy fully autonomous vehicles, that is, self-driving cars, is around five to ten years. Legislation should also go hand in hand with software development to put autonomous vehicles on our roads.

The safety benefits of autonomous vehicles cannot be ignored. Autonomous vehicles would reduce accidents caused by human error to a large extent and hence will reduce the total number of road traffic accidents by a substantial amount. The challenge is in testing and validating the software developed for autonomous vehicles.

### Flying taxis and drone deliveries

Commercial tests are underway for flying taxis and delivery drones. It will soon be a commercial reality. Taking taxis to the skies would reduce congestion on roads and offer a quicker, more efficient way of transport. Regulations regarding noise pollution, powering the vehicles with zero emissions technologies, and ensuring they operate safely in already over-crowded cities are required before rolling this out in public.

Drones are already used in Military applications. By 2030, we could see wider-scale aerial delivery in urban areas, completely changing the way we order and receive goods.

### 4.3 Shared Mobility:

There will be no need to own a car in 2030. Sharing of transportation services and resources among users will become the norm of the future. This includes public transport, micro-mobility for last-mile connectivity like bike sharing, scooter sharing, car-based modes (car sharing, rides on-demand, and micro-transit), and commute-based modes or ridesharing (carpooling). Examples of mobility-sharing services include Lyft, Uber, Bird, Scoop, and Moovit.

### 4.4 Connectivity:

A connected vehicle can communicate with other systems outside the car (in both directions). This allows the vehicle to share data with surrounding devices like cars, homes, offices, or infrastructure. The connectivity in a vehicle enables infotainment, safety, roadside assistance, diagnostics efficiency, navigation, and payments. The car will be the third living space in the future.

With shared mobility, we can go from place to place, connecting all the transport evolutions we've already discussed. In 2030, all our transportation needs up to the last mile connectivity will be fulfilled by a single app, accessed using our phones. For example, you might reserve a shared electric scooter outside your office, book a train ticket before you reach your departure station, and hire an autonomous vehicle to take you to your destination upon arrival.

### 3. Infrastructure set-up to implement CASE

#### 5.1 Intelligent Transport System:

Future vehicles will be connected, shared, Autonomous, and Electrified. To realize CASE, it is necessary to come up with an ecosystem that provides the mandatory infrastructure to implement.

And since the management of these vehicles, and the roads, posed a problem for the authorities, the concept of an Intelligent Transportation System (ITS) has been defined.

Intelligent Transportation System (ITS) is a solution devised to manage and regulate all problems related to traffic and transportation in India. The idea behind this system is to utilize information technology to enhance traffic management, be more mindful of the environment and reduce commutation time.

The working of Intelligent Transportation System works on the principle of collecting the relevant data, then analyzing and finally, using the results to implement viable solutions for traffic management. The details of ITS are defined in terms of

1. Advanced Traffic Management System (ATMS)
2. Advanced Traveller Information System (ATIS)
3. Advanced Vehicle Control System (AVCS)

4. Advanced Public Transportation System (APTS)
5. Advanced Rural Transportation System (ARTS)
6. Advanced Commercial Vehicles Operations System (ACVOS)

One of the successful ITS implementation that the ARAI came up with was AIS-140

The AIS-140 is the latest Automotive Industry Standard introduced by the Automotive Research Association of India (ARAI) and deals with the requisite safety features required on public transport and commercial vehicles. The MoRTH issued a directive stating that AIS-140 should be implemented on all new and existing vehicles by 1 April 2018.

Safety aspects are defined in AIS-140, according to which all public transport and commercial vehicles should have the

- Ability to transmit real-time location, and other vehicle performance information
- One or more emergency buttons across the vehicle

It supports a minimum hardware configuration standard, data storage and forwarding mechanism, and over-the-air updates. This should be implemented in all the public transport systems.

The main aim of the AIS-140 is to ensure vehicle safety and bring a degree of intelligence into public transport systems. When all public vehicles comply with this regulation, we will ensure passenger safety, Optimize public transport vehicles, Monitor driver behavior, and Improve vehicle performance.

However, OEMs, Tier-1 suppliers, and after-market suppliers must align their manufacturing according to the AIS-140-compliant transport system.

### 5.2 M-Parivahan seva:

This app introduced by the government of India ensures that the driver can drive anywhere in India using the app without having to carry a hard copy of the license document.

## **4. Conclusion**

"The transportation system is the backbone for the economic growth of any nation." With the focus and support provided by the government of India, it will not be far when we can realize the

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dream of a Connected, Autonomous, Shared mobility and Electrified solution on roads. Economic development promotes social equality among the masses so that there is an equal distribution of wealth and income and people enjoy some quality of wealth, status, and livelihood.

### **5. Bibliography**

Source: <https://blog.olacabs.com/how-india-commuted-in-2016-our-insights/>

Source: [https://morth.nic.in/sites/default/files/RA\\_2021\\_Compressed.pdf](https://morth.nic.in/sites/default/files/RA_2021_Compressed.pdf)

Source: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/781521473177013155/the-cost-of-air-pollution-strengthening-the-economic-case-for-action>

**A Study on Green Banking System  
Adopted by Indian Banks for Green Marketing**

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**Abstract:**

Green Banking is a new phenomenon in the financial world. Banks as the financing agent of the economic and developmental activities have an important role in promoting overall sustainable development. Green banking is the term used by banks to make them much more responsible to the environment. The term green banking means developing inclusive banking strategies which will ensure sustainable economic development.

Green Banking entails banks to encourage environment friendly investments and give lending priority to those industries which have already turned green or are trying to go green and, thereby, help to restore the natural environment. Green banking means combining operational improvements, technology and changing client habits in banking business.

It means promoting environmental- friendly practices. This comes in many forms such as using online banking instead of branch banking; paying bills online instead of mailing them; opening up CDs and money market accounts at online banks, instead of large multi-branch banks; or finding the local bank in the area that is taking the biggest steps to support local green initiatives. Foreign banks are practicing green banking on a much serious note. Still many of them are keen to actively pursue this strategy.

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**Keyword:** Green baking, Finance, Environment, Investments, Development.

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**Introduction to green marketing,** Green marketing has been an important academic research topic in recent days and has been defined in many different ways. According to the American Marketing Association - Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants. This definition incorporates much of the traditional components of the marketing definition and includes the satisfaction of these needs and wants occur with minimal detrimental impact on the nature.

**Green Marketing – Need,** Many companies have started realizing that they must behave in an environment –friendly fashion and believe both in achieving environmental objectives as well as profit related objectives. Various regulations recently framed to the adoption of green marketing as a compulsion rather than a choice. For example, the ban of plastic bags in many parts of the country and prohibition of smoking in public areas, etc.

Companies may lose many loyal and profitable customer and consumers due to absence of green management. Green marketing forces business to change every aspect of their supply chain to become more environmentally conscious. When brands set an example for their customers, more people are made aware of the environmental implications of their purchases and have the opportunity to change their purchase behavior. Green marketing promotes an eco-friendly product in an eco- friendly way.

**Green Banking,** Green Banking is like a normal bank, which considers all the social and environmental factors; it is also called as an ethical bank. Ethical banks have started with the aim of protecting the environment. These banks are like a normal bank which aims to protect the environment and it is controlled by same authorities as what a traditional bank do.

There are many differences compared with normal banking, Green Banks give more weight to environmental factors, their aim is to provide good environmental and social business practice, they check all the factors before lending a loan, whether the project is environmental friendly and has any implications in the future, you will awarded a loan only when you follow all the environmental safety standards.

Defining green banking is relatively easy. Green Banking means promoting environmental – friendly practices and reducing your carbon footprint from your banking activities. This comes in many forms.

1. Using online banking instead of branch banking.
2. Paying bills online instead of mailing them.
3. Opening up accounts at online banks, instead of large multi-branch banks
4. Finding the local bank in you are at hat is taking the biggest steps to support local green initiatives.

### **Green Banking Products**

1. Green Loans: means giving loans to a project or business that is considered environmentally sustainable.
2. Green Mortgages: refers to type of mortgage that provides you a money-saving discount or a bigger loan than normally permitted as a reward for making energy-efficient improvements or for buying a home that meets particular energy–efficiency standards.
3. Green Saving Accounts: In case of Green Saving Accounts, banks make donations on the basis of savings done by customers. The more they save, the more the environment benefits in form of contributions or donations one by banks.
4. Mobile banking and online banking: These new age banking forms include less paperwork, less mail, and less travel to branch offices by bank customers, all of which has appositive impact on the environment.

### **Review of Literature**

**NigamandaBiwas, (2011)** interpreted Green Baking as combining operational improvements, technology and changing client habits in market place. Adoption of greener banking practices will not only be useful for environment.

But also benefit in greater operational efficiencies, a lower vulnerability to manual errors and fraud and cost reductions in banking activities.

He stated that the concept of green baking will be mutually beneficial to the banks, industries and economy. He has listed several benefits of green banking.

**Dharwal& Agarwal (2013)** studied that green banking is a key in mitigating the credit risk, legal risk and reputation risk. The author had suggested some green banking Strategies like carbon credit business, green financial products, green mortgages, carbon foot print reduction and social responsibility services towards the society.

### Objectives of the Study

- a) To comprehend how Indian Banks establish their Green Banking Strategies for Green Marketing
- b) To understand about the challenges India is encountering with the adoption of green banking.

### Methodology

This is exploratory research thus methodology was based on literature review and secondary data. The data collection about Indian banks through was done through secondary published sources. Secondary published sources were the reports on Green Banking and other relative information published on the banks and other internet sites.

### Scope of Green Banking In India

There has been a remarkable improvement in the working of banks in terms of cutting costs, increasing productivity, improving the profitability, controlling and management of the Non-Performing Assets (NPAs), face the risks, carry out the Asset Liability Management, manage the changes in interstates, handle the foreign exchange rate fluctuations, comply with the regulator's requirements and finally improve the customer service to their best satisfaction. Green banking avoids as much paper work as possible and rely on online/electronic transactions for processing that we get green credit cards and green mortgages.

Less paperwork means less cutting of trees. It also involves creating awareness to banking business people about environmental and social responsibility enabling them to do an environmental friendly business practice.

### Benefits of Green Banking in India

- a) **Avoids Paper Work:** Paperless banking almost all banks in India are computerized or operate on a core banking solution (CBS). Thus there is ample scope for the banks to adopt paperless or less paper for office correspondence, audit, and reporting etc. these banks can switch over to electronic correspondence and reporting there by controlling deforestation.
- b) **Creating Awareness to Business People about Environment:** Many NGOs and environmentalists are propagating environment consciousness among the public.
- c) **Loans at Comparatively Lesser Rates:** Banks can also introduce green bank loans with financial concessions for environment friendly products and projects such as fuel efficient



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vehicles, green building projects, housing and house furnishing loans to install solar energy system etc.

- d) Environmental Standards for Lending: Banks follow environmental standards for lending, is really a good idea and it will make business owners to change their business to environmental friendly which is good for our future generations.

### **Green Banking Strategies Adopted By Indian Banks**

The Reserve Bank of India document titled 'Policy Environment' dated 8<sup>th</sup> November, 2010 includes on Pages No. 56 and 57 a reference to Green Banking and Green IT initiatives for banks in India. Like any other Corporate, banks in India too are adopting the principle of Corporate Social Responsibility (CSR) and are concerned about the protection of environment. Mainly, the computerized environment and facilities like on-line banking are helping the banks to promote the green banking concept [Shalini Mehta (2011)]. Paper work is being reduced consciously at all levels by bankers and customers. While offering several simple suggestions for practicing green banking arrangements

#### **ATM services**

##### **Debit card**

##### **VISA & Master Card**

##### **ATM services**

##### **Debit card**

##### **VISA & Master Card**

##### **Credit Card**

#### **Online banking services**

- Fund Transfer to Self Accounts
- Third Party Fund Transfer
- Inter Bank Payee Fund Transfer
- PPF transfer
- Setting up Standing Instruction
- E-Tax Payment

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- E-ticketing
- Bill Payments
- Visa Money Transfer
- Demat Enquiry
- Online Application for IPO.

### Challenges

- 1) *Key challenges faced by banks while implementing green banking strategies. Following are the challenges:*
- 2) **Confronting Challenges to Going Green:** Green banks support wonderful causes; they do face a lot of challenges as for-profit entities. Just like those socially conscious and environmental mutual funds, they are expected to encounter more obstacles than typical run-of-the-mill bank.
- 3) **These banks are still start-ups:** Apparently, it takes 3 to 4 years for a typical bank to start making money. Many green banks in business today are very new and are still in start up mode. It doesn't help that these banks are trying to get their footing during a recession.
- 4) **Operating expenses and costs are higher:** Green banks require specialized talent, skills and expertise as well, due to the kind of customers they are servicing. Employees, such as loan officers, need to have additional background and experience in dealing with green businesses and consumers. Plus, giving breaks to such clients via discounted loan rates can eat at their profit margins.
- 5) **Proper legislation is not yet framed:** Government must design proper legislation of environmental rules for banks and ensure enforcement. The problems in India are the legislation is not yet framed and in few cases, things are not strictly enforced, but things can change overnight resulting in major compliance problems for the companies concerned and increased risk for the banks that have lent to them. There should be continuous dialogue relating to environmental matters with relevant audiences, including stake holders, employees, customers, governments and the public.
- 6) **Lack of clear policies:** Clear policies are required to altering the present management systems to incorporate sustainability issues.

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- 7) Unavailability of skilled employees: Skilled employees are required to implement the strategies properly.

### **Conclusion**

Green Banking has been boosting to improve the environment and promoting economic growth. Until a few years ago, most traditional banks did not practice green banking or actively seek investment opportunities in environmentally-friendly sectors or businesses.

There are lot of opportunities and challenges for Indian banks in adopting 'Green Banking' as profitable business. Green banking if implemented sincerely will act as an effective extant deterrent for the polluting industries that give a pass by to the other institutional regulatory mechanisms. Therefore, for sustainable banking, Indian banks should adopt green banking as a business model without any further delay.

### **References**

1. Axis Bank. (2013). AnnualReport2012-13.Mumbai: Axis Bank.
2. [Alice Mani, "Green Banking through Green Lending", [www.ibmteu.org/GVCG/Papers/IC-140.pdf](http://www.ibmteu.org/GVCG/Papers/IC-140.pdf), 2011.
3. Alpesh Shah et. al. "Indian Banking 2020 – Making the Decade's Promise Come true",Report of BCG, FICCI and Indian Banks' Association, Sept.2010.
4. Bank of Baroda. (2013). 2012-13 Annual Report. Vadodara: Bank ofBaroda.
5. Bank Track. (2014, 03 06). Home: Bank Track. Retrieved from BankTrack:[http://www.banktrack.org/show/pages/about\\_banktrack](http://www.banktrack.org/show/pages/about_banktrack).
6. Bihari, S. C. (2011). Green banking -towards socially responsiblebankinginIndia.IJBIT, 82-87.
7. Biswas, N. (2011). Sustainable Green Banking Approach: The Need of the Hour. Business Spectrum,32-3
8. BSE-INDIA.(2014,0306). Downloads: .Retrieved from BSE:
9. <http://www.bseindia.com/downloads/about/abindices/file/BSE- GREENEX%20Factsheet.pdf>
10. Business Standard. (2014, 0306). Article: Business Standard (April 19,2010). Retrieved from Business Standard: <http://www.business-standard.com>.

**A study on digital payment security concerns post Covid impact on consumers  
with reference to city of Bangalore.**

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**Introduction:**

Covid-19 pandemic has changed the whole way of human living. We have changed physical model of work to hybrid model, Teaching and learning has changed hybrid model and even online business and online payments post Covid has increased significantly. This raise in online payments through various modes such as UPI, Digital wallets, bank transfers etc. has led to security concerns, as these payment mechanism uses open access network called internet for transactions. This study focuses on the impact of digital payment security concerns post Covid on customers.

**OBJECTIVES OF STUDY:**

- a. To study the impact of digital payment security concerns on customer's adoption of digital payment post covid
- b. To study the reasons of security breach in digital payments.

**Statement of problem:**

We all must agree to the fact that technology growth and security are always contradicting. Increased use of digital payments and advancement in online payments has made the users to share their sensitive data online, this has led to security breaches. This study will focus on impact of digital payment security concerns on customer's adoption of digital payment post covid.

## **Growing Infrastructure A key to Transforming Indian Economy**

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**Key words: Digital payments, Security breach, Covid-19, Pandemic, Cashless transactions**

### **Objectives:**

- a. To study the digital payments security concerns post Covid
- b. To study digital payment usage post Covid

### **Research Methodology:**

The study is descriptive in nature as it aims to study the altering phenomenon of digitalization of payment methods and its impact on consumer preferences in the Indian market. Data for this study is collected by selection of respondents through simple random sampling.

Statistical analysis:

Number of samples used- 50

Statistical tool- Excel

### **Data collection:**

The Primary data will be collected through the administration of the questionnaire, while the secondary data will be based on published articles in journals, magazines, books, studies, websites, reports etc.

### **Scope of the Study:**

The study is confined to the city of Bangalore Urban (North and South) and data collection was purely through online

### **Limitation of Study:**

- a. Time constraint
- b. Data collected from respondents in Bangalore North and south are used to draw generalized conclusions on entire City.
- c. No predefined test were made in selecting total respondents.

### **Literature review:**

1. Raja Shekhar Midthanpally (2017) studied the recent demonetization in India is an issue of potentially wider relevance that requires further analysis.

## **Growing Infrastructure A key to Transforming Indian Economy**

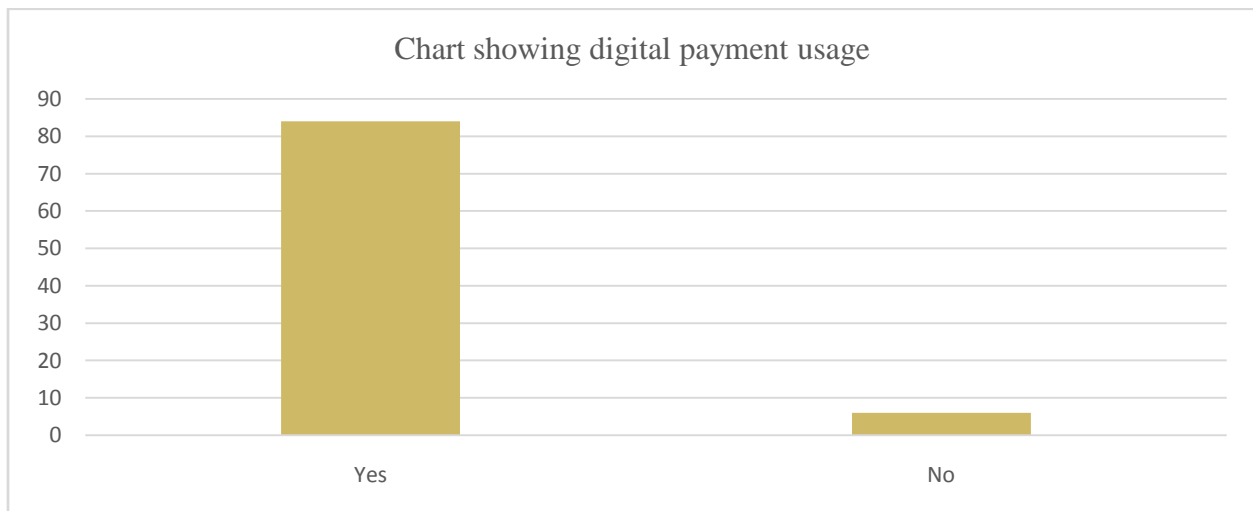
2. Dr. Podile Venkateshwarroa (2017) examined studied, the recent demonetization in India is an issue of potentially wider relevance that requires further analysis.
3. *NEETU KUMARI, JHANVI KHANNA (2016)* studied, Cashless economies are those that use mostly plastic or digital money and thus minimal cash or money in paper form.
4. Gresvik and Owre (2002) studied how much it costs Norwegian banks to process various payment instruments.
5. Ms. Yashna Samuel (2016) Government of India announced the demonetization of all Rs.500 and Rs.1000 banknotes of the Mahatma Gandhi series.

### **Research Gap:**

Previous researchers have focused economy as a whole for analyzing the awareness of digital payment security concern. This research focuses only with respect to awareness of Bangalore customer's security concerns with reference to digital payments.

### **Data analysis and interpretation:**

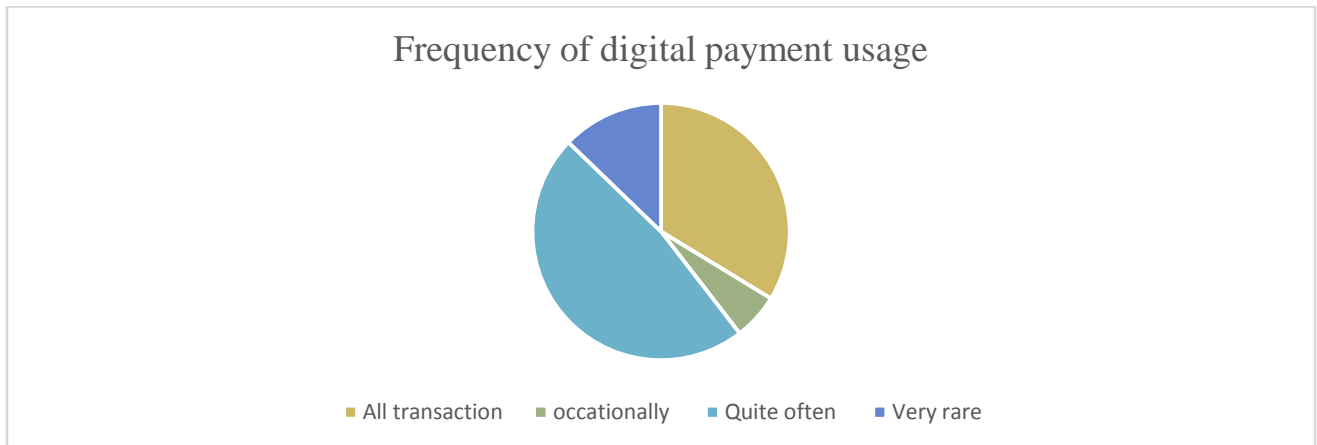
#### **Graph: 1**



### **Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondents majority of them use digital payments for transactions

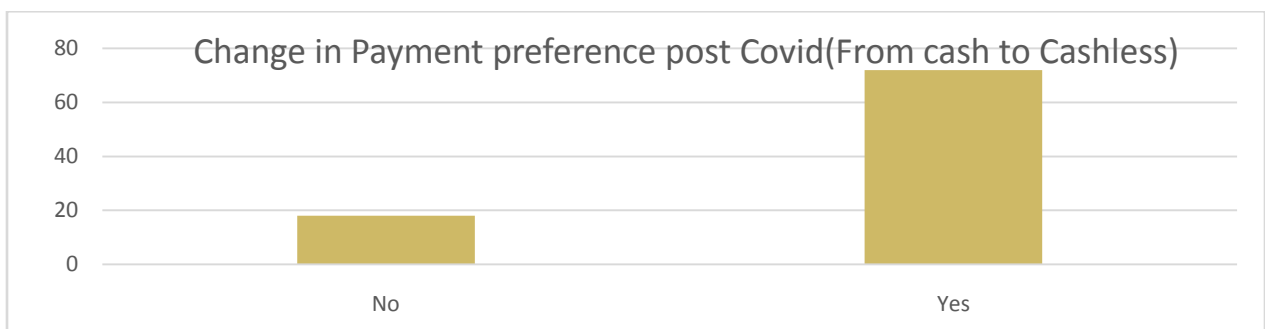
**Graph: 2**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondents majority of them use digital payments for transactions quite often and also for all transactions .This shows digital payment acceptance in huge in the city.

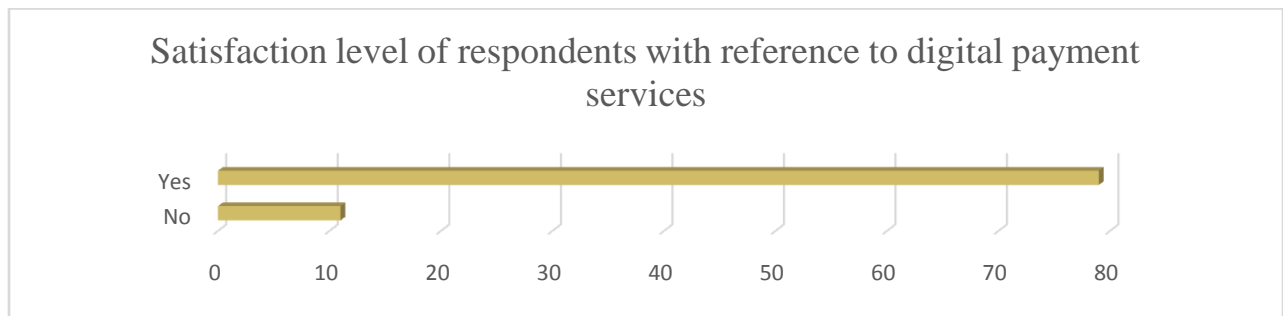
**Graph: 3**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority respondent's preference has changed from cash to digital payments post Covid. This shows usages of digital payments are increasing in the city.

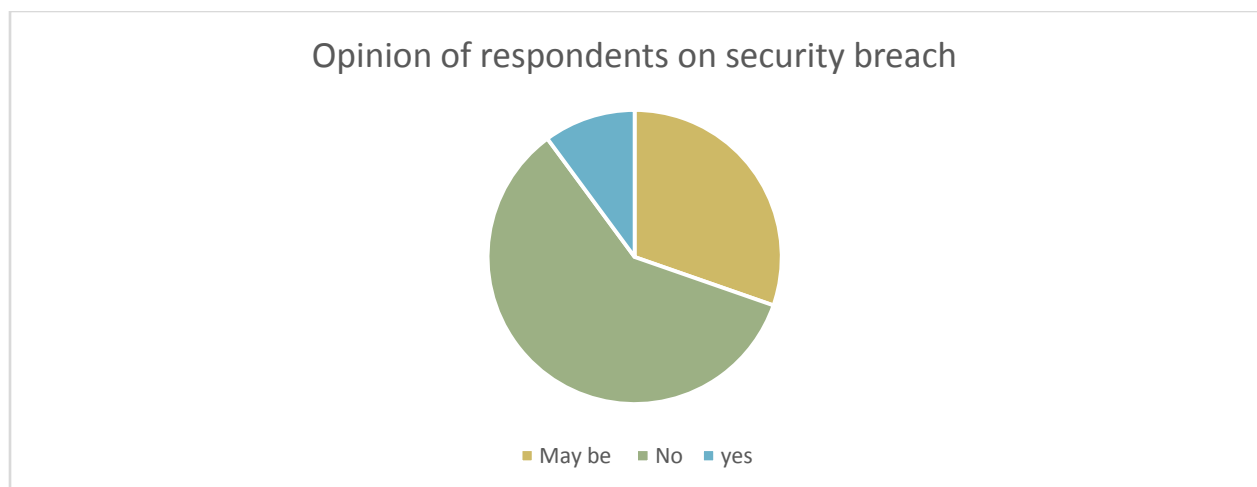
**Graph: 4**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority respondents feel satisfied with the security provided by the digital payments.

**Graph: 5**

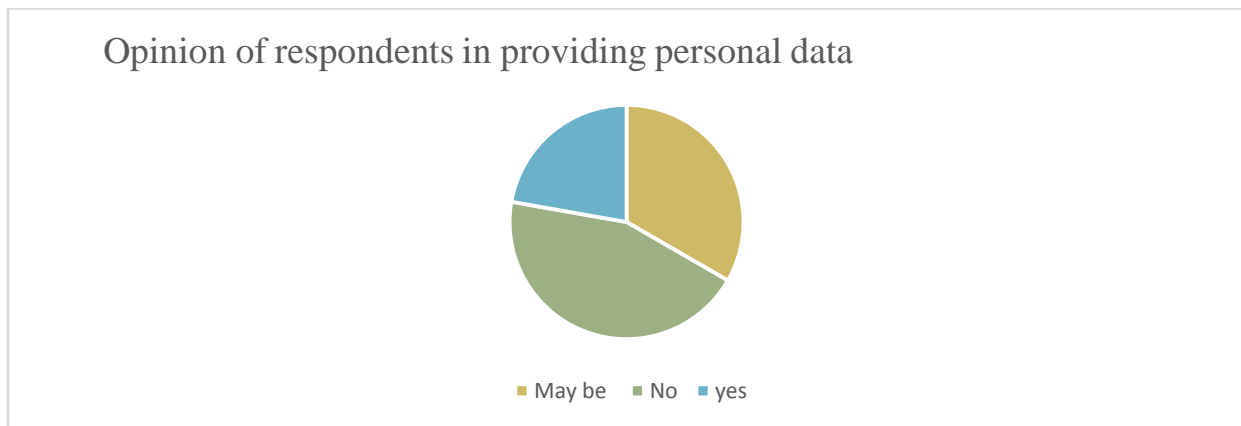


**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority respondents feel that their data has not been misused by the digital payment service providers



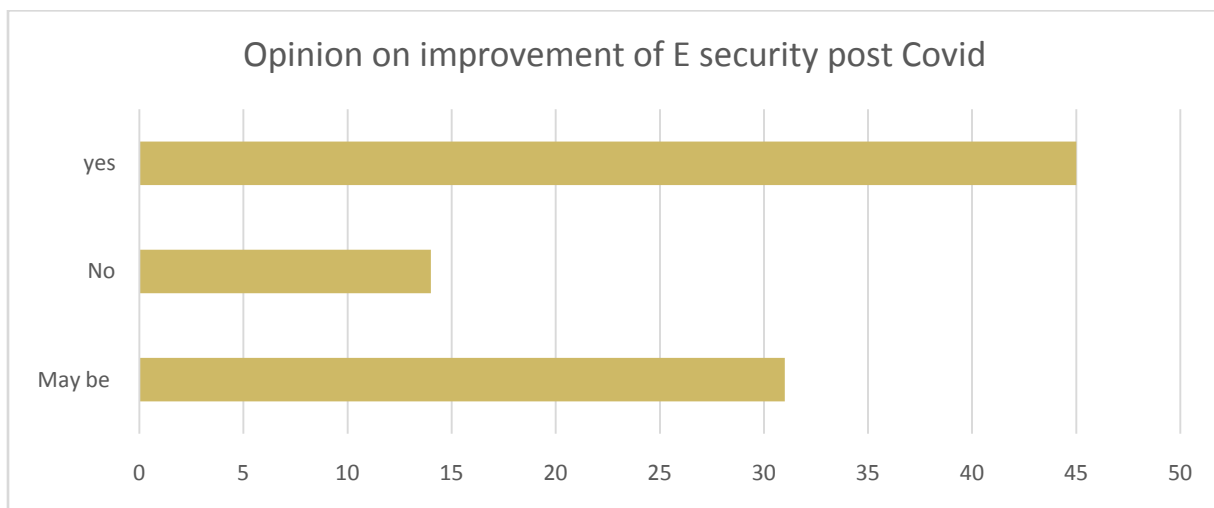
**Graph: 6**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority respondents don't feel safe in providing their personal data such as location and OTps

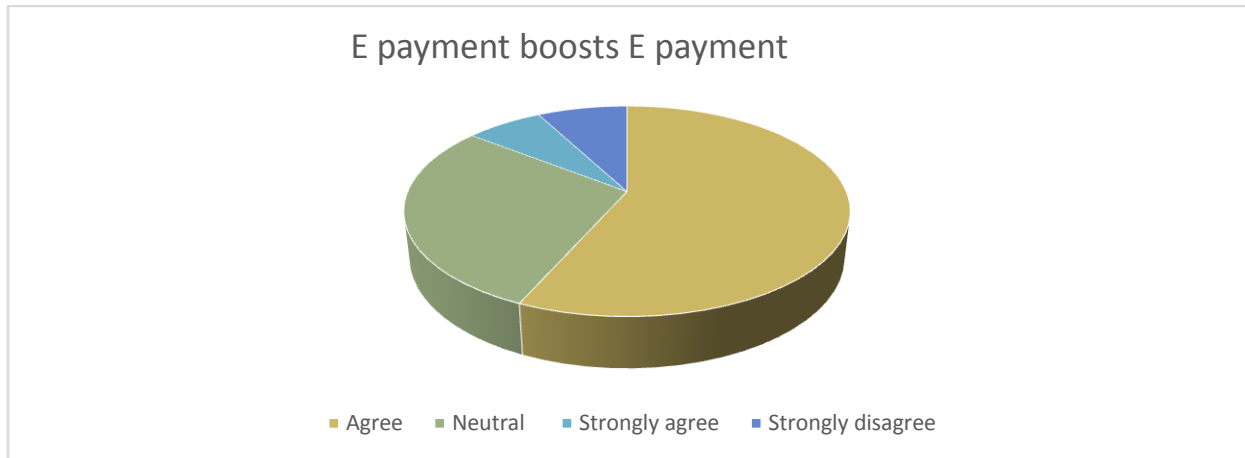
**Graph: 7**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority respondents feel E-security has been improved post Covid by service providers

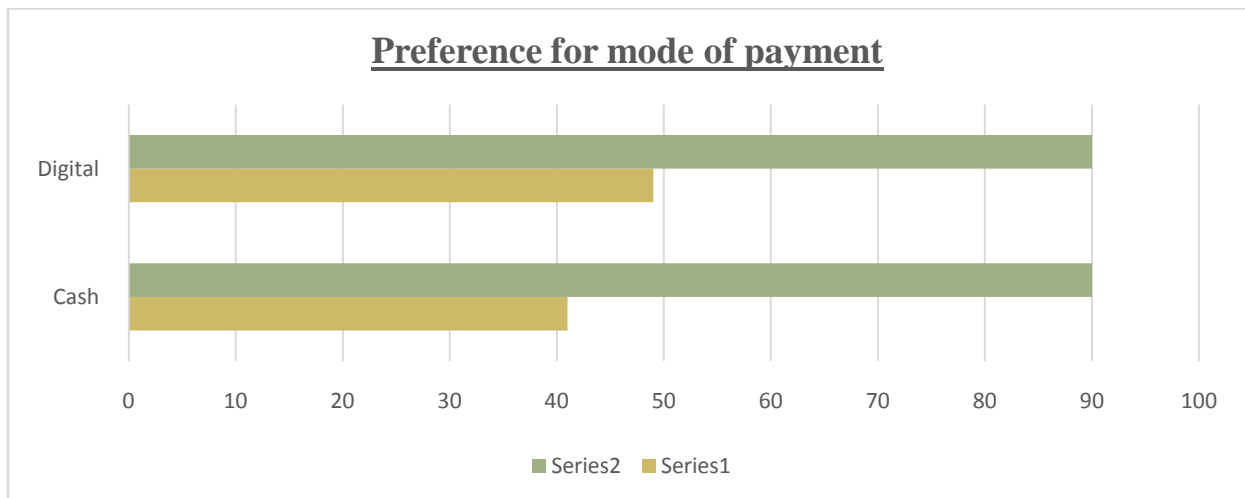
**Graph: 8**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority agree that E security will boost E payments

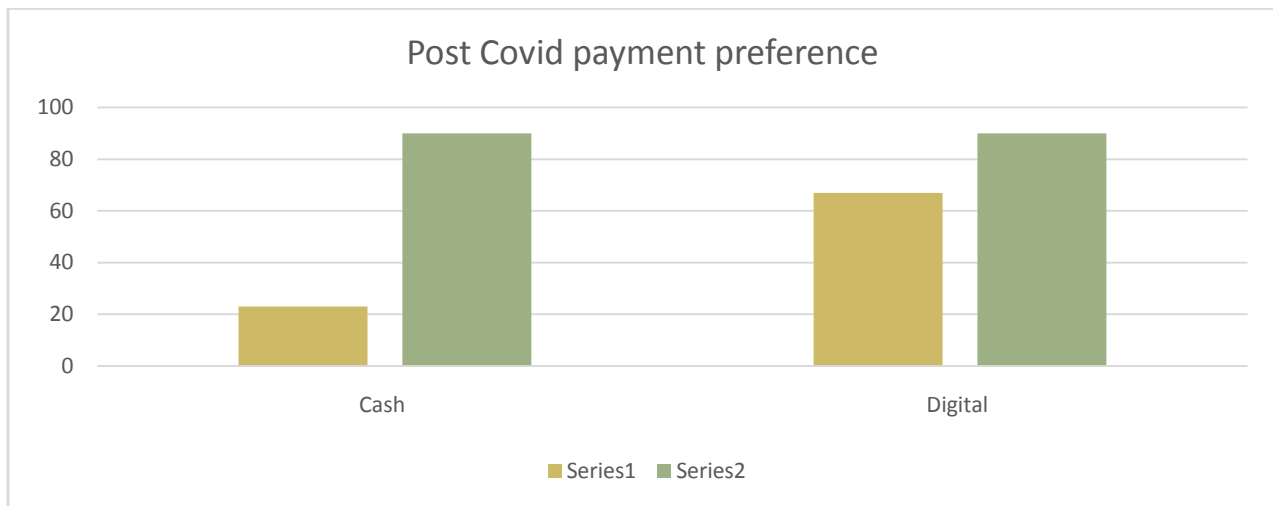
**Graph: 9**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondent's majority preference digital mode of payment as far as security is concerned.

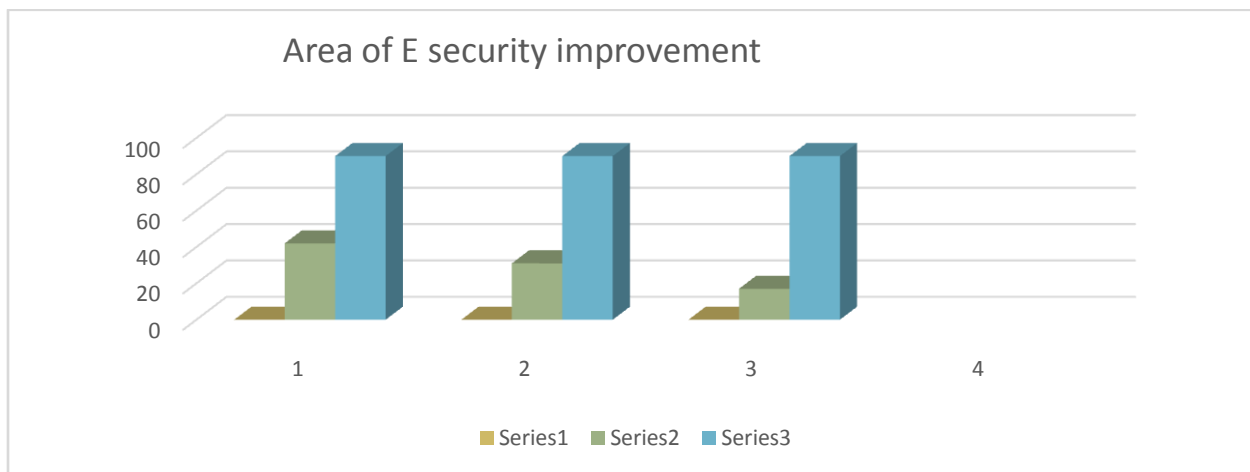
**Graph: 10**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondents, majority respondent's preference digital mode of payment post Covid.

**Graph: 11**



**Analysis and interpretation:**

From the above graph it can be interpreted that, out of 90 respondents, majority respondents feel data should be fully encrypted.

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### **Summary of findings and suggestions:**

#### **FINDINGS:**

1. Many customers are using digital payments more frequently, which shows digital payment acceptance is huge in the city
2. Majority respondent's preference has changed from cash to digital payments post Covid. This shows usage of digital payments is increasing in the city.
3. Respondents feel satisfied with the security provided by the digital payments service providers, this shows the security provided for E payments are improved post Covid
4. Many respondents feel that their data given for transactions are not miss used by the service providers
5. Respondents don't feel safe in providing their personal data such as location and OTps
6. Strong E security is boosting E payments
7. As far as security is concerned people feel digital payment are safe compared to cash payments
8. Digital mode of payments are preferred over cash payment post covid
9. Respondents feel data provided by the customers should be fully encrypted

#### **Suggestions:**

1. Companies should try to avoid collecting too many data such as location, OTps etc
2. Data encryption should be improved
3. As the usage of digital payment is increasing day by day security for the transaction should be strengthened
4. Never the company should misuse the customer's data
5. Multiple security plans should be adopted by the companies to completely secure customers' data

#### **Conclusion:**

From the above research it can be concluded that strong security will always boost E payment usage in the city. It is the responsibility of the service providers to ensure consumer data is always safe and secure. Though the people are less concerned about the E security post Covid the service providers should uphold the trust of people and protect the integrity of users.

### When there is phone there is no fear for payment

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#### **Abstract:**

India's largest wallet player, Paytm, claims around 260 million users and MobiKwik, 60 million. While India's largest bank, State Bank of India has 195 million customers, Paytm claims around 7 million daily transactions and Mobi Kwik about 3 million. There are enough apps and platforms that help pay digitally — UPI, BHIM, AadhaarPay, Paytm, MobiKwik, HDFC PayZ app, SBI Buddy, PayU, Tez, besides credit cards and debit cards, but people still seem more comfortable reaching for cash than an app.

On October 4, 2017, RBI announced the interoperability of e-wallets of private firms which will be allowed with six months to those compliant with KYC norms. Interoperability helps users of one app to transact with users of a different app. This facility is currently functional under the state-owned Unified Payment Interface (UPI), recently held 23<sup>rd</sup> GST Council meeting on 10<sup>th</sup> November 2017 at Guwahati, and announced the provision of incentives for payments that are settled electronically. One 97 Communications, the holding company has started Paytm on August 2010. In 2016, the business was split into three parts. One97 retained businesses like mobile content, games and insurance.

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**Keywords:** Digital Economy, Digital Payments, e-Wallets, interoperability, Paytm.

### **Objective of the study**

The present study focuses on the role of e-wallets in promoting cashless economy, with special reference to Paytm e-wallet. The study is based on secondary sources of data.

### **Literature Review**

‘Dealing in cash currency had led to a lot of aberrations in terms of tax non-compliance, currency being used for collateral purposes like crime, escaping the tax net and not getting into the banking system’ – **Finance Minister, Arun Jaitley**.

In his Budget speech, he has given a push to digital transactions. To incentivize the use of BHIM (Bharat Interface for Money) app, he announced a promotional 'Referral Bonus Scheme' for individuals and 'Cash-back Scheme' for merchants. He also announced that the merchant version of Aadhaar Enabled Payment System (AEPS), 'Aadhaar Pay' will be launched shortly. The government has set a target of 2,500 crore digital transactions for FY 2017-18 through UPI, Aadhaar, IMPS and debit cards in the Budget 2017.

To achieve the mission of a less cash economy to reduce the generation and circulation of black money, **Budget 2017** has proposed to insert Section 269ST in the Income-tax Act, i.e., no person shall receive an amount of Rs 3 lakh or more by way of cash, in aggregate from a person in a day, in respect of a single transaction; or in respect of transactions relating to one event or occasion from a person. It is also proposed that the above restrictions will not apply to the government, any banking company, post office savings bank or co-operative bank. The Budget also proposes levy of penalty on a person who receives Rs 3 lakh and above.

**The Economic Survey** has also put significant emphasis on the issues of cyber-security and inter-operability in digital payments, to the extent of also warning banks to not thwart inter-operability.

**Monica Jasuja**, MasterCard India, in her **India Budget 2017 analysis** states- “Already there is evidence of increased digital transactions. The BHIM app has been launched. It will unleash the power of mobile phones for digital payments and financial inclusion.

In the words of **Aruna Sundararajan, secretary, ministry of electronics and IT** - "The idea is that the consumer interest is protected and we should grow this business in an orderly manner. If

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wallets have to grow as an instrument, issues such as what is the liability of the service provider,



how the data is being protected, what the grievance redressal means have to be addressed"

**Law and IT minister Ravi Shankar Prasad** - on mobile manufacturing capacity, he said, "From 6 crore mobile handsets in 2014-15, India's mobile manufacturing capacity has increased to 11 crore mobile handsets in 2015-16. With 72 new mobile handset and component manufacturing units set up in last two years, India has

emerged as a mobile manufacturing hub."

**Vijay Shekhar Sharma**, Paytm founder tells ET magazine that he foresees a battle between ecosystems, Paytm being one of them. There will be five ecosystems in India: Paytm, Amazon, Google, Facebook and the Naspers-Tencent ecosystem that has invested in companies like Make-MyTrip and PayU. He is now on Forbes' list of Indian Billionaires.

Modes of digital payment:

UPI: UPI or unified payment interface, a digital payment mode, which is used to make fund



transfers through the mobile app between two accounts. One has to register for mobile banking to use UPI apps. Currently, this service is only available for android phone users. One has to download a UPI app and create a VPA or UPI ID. There are many UPI apps available such as BHIM, SBI UPI app, HDFC UPI app, iMobile, PhonePe app etc.

It is not mandatory to use the UPI app from the respective bank to enjoy UPI service. One can download and use any UPI app. UPI apps are a faster solution to send money using VPA or even IFSC and account number. But without android phone one cannot use UPI app.

Aravind Subramanian cited UPI as a major achievement of the year, stating that it was "making the M in JAM a reality." JAM stands for the Narendra Modi government's vision of Jan Dhan, Aadhaar, and Mobile.



**AEPS:** Aadhaar Enabled Payment Service is an Aadhaar based digital payment mode. Customer needs only his or her Aadhaar number link with bank, to pay to any merchant. AEPS allows bank to bank transactions. It means the money will be deducted from givers account and credited to the receiver's account directly. Unlike cards and USSD, AEPS does not have any charges on transactions. The good thing about AEPS is that it doesn't need user's signature, bank account details or any password. It uses user's fingerprint as a password. No one can forge one's fingerprints, thus it is the most secure digital

payment mode.

**USSD:** USSD banking or \*99# Banking is a mobile banking based digital payment mode. A smart phone or internet connection is not required to use USSD banking. One can easily use it with any normal feature phone. USSD banking is as easy as checking mobile balance. The \*99# code works as a bridge between your telecom operator's server and your bank's server. It uses your registered mobile number to connect with your bank account. Hence, dial \*99# with your registered number only. USSD banking has a transaction limit of Rs. 5000 per day per customer. RBI has also set a maximum charge of Rs. 2.5 per operation.

**Cards:** These are provided by banks to their account holders and have been the most used digital payment modes till now. Many use cards for transferring funds and making digital payments. Credit cards, debit cards and prepaid cards are the main types of cards.

**Credit cards** are issued by banks and some other entities authorized by RBI. These cards give you the ability to withdraw or use extra money. Credit cards are used for domestic as well as international payments.

**Debit cards** are issued by the bank where you have your account. You can use these cards for the money in your account. The payments you make with these cards debit from your account and credit immediately to the payee's account. You can use these cards to make payments to one bank account to another.



**Prepaid cards** are another type of cards which you use to pay digitally. You must have to recharge these cards before using just like prepaid SIM cards.

Cards are one of the best modes when you pay at portals or E-commerce sites. But if we talk about paying to merchants it is not the most suitable way. It charges 0.75% – 2.0% on transactions. Also, you cannot use cards to pay if the merchant does not have a PoS (swipe) machine.

**RuPay Card:** It is an Indian version of credit/debit card. It is very similar to international cards such as Visa/Master. National Payments Corporation of India (NPCI) initiated the launch of RuPay card in India. It was done with the intention of integration of payment systems in the country.

### E-Wallets

E-wallet or mobile wallet is the digital version of physical wallet with more functionality. One can keep money in an E-wallet and use it when needed. Use the E-wallets to recharge phone, pay at various places and send money to friends. With a smart phone and a stable internet connection, one can use E-wallets to make payments. These E-Wallets also give additional cash back offers. Some of the most used E-wallets are State bank buddy, ICICI Pockets, Freecharge, Paytm etc. One cannot use e-wallets to money to a bank account. These apps do not ask for any PIN or password to perform a transaction and hence if phone is not locked anyone can use the money in e-wallet.

**BHIM app:** It is a Mobile App developed by National Payments Corporation of India (NPCI), based on the Unified Payment Interface (UPI). It was launched by Narendra Modi, the Prime Minister of India, at a Digi Dhan programme in New Delhi on 30 December 2016. It has been named after Bhim Rao Ambedkar and is intended to facilitate e-payments directly through banks and as part of the 2016 Indian banknote demonetisation and drive towards cashless transactions. This UPI app supports all Indian banks which use that platform, built over the Immediate Payment Service infrastructure.

### A Case Study of Paytm

One97 communications, holding/parent company of Paytm started in 2000. It recorded a profit of Rs.5 crore in 2013-14. It reported a loss of Rs.372 crore for 2014-15, and a loss of Rs.1549 crores for 2015-16. During 2016-17, it reported revenue of Rs.813 crores and net worth of Rs.2376 crores without disclosing profitability.

Post demonetization, Paytm wallet grew at a fast pace and today has around 280 million users from 110-120million a year ago. In the wake of demonetization, total electronic and card payments grew 46% by value and 65% by volume in 2016-17 over the previous fiscal year.

One97 Communications, the holding company that started Paytm, has been diversifying and experimenting with retail ecommerce and movie and travel ticket bookings. In 2015 it got the in-principle approval from RBI to start a payment bank and which was launched in May 2017. Apart from growing the bank and a retail ecommerce offering, an investment of almost \$500 million has been promised to meet RBI's KYC requirements for wallets.

In December 2016, Vijay Shekhar Sharma sold 1% in One97 company for Rs.325 crores to other shareholders to raise money to invest in Paytm Payments Bank. In March 2017, Paytm E-commerce has raised \$200 million from Alibaba Group and SAIF partners. In March, Reliance Capital, Samma Capital and SAP ventures sold their combined stake of 4.3% in One97 company to Alibaba Group and Ant Financial. Reliance Capital got Rs.275 crore for a stake it has bought for Rs.10 crore in 2010. The deal valued at \$5.7- \$5.9 billion.

### Shareholding Pattern of One97 Communications (Parent company of Paytm):

Alibaba and Ant Financial-	30%
Softbank-	20%
SAIF partners-	25%
Vijay Shekhar Sharma-	17-18%
Employees-	Rest

**Shareholding Pattern of Paytm Payments Bank:**

**One97 Communications-** **49%**

**Vijay Shekha Sharma-** **51%**

Paytm will be a super - app that is able to do all payments from bills and school fees to buying stuff. Sharma says one of the reasons that Paytm deserves to succeed is that it has managed to hold on to a core group of executives for a long time. He point out that Paytm had started businesses like food delivery and grocery retail that were later closed down. There is a lot of talk about destiny in any conversation-and Sharma says he often feels he and his team are “God’s Children”and Paytm is at its “Simba moment”.

**Conclusion**

To promote Digital India initiative and encourage for cash less payments, the Indian Government has introduced many digital payment modes. Unified Payments Interface (UPI) for smartphones; Unstructured Supplementary Service Data (USSD) based mobile banking for basic and feature phones; Bharat Interface for Money (BHIM) app, a unified UPI app; Aadhaar Pay that enables to make cashless money using Aadhaar card and fingerprint for biometric authentication, and to further ease the payments process, Bharat QR Code for cashless electronics payments, were introduced by the government.

### An empirical study on Green Banking approaches in Indian Economy

Geetha B P (Research scholar Jain-Deemed to be university)

Guided by Dr. Nethravathi

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#### ABSTRACT

Green banking is motor driven financial institutions which try to invest their funds on clean energy projects which is one of the sustainable goal also helps to fight climate change in the world. The purpose of the article is to understand the various green banking practices adopted by the national and international banks in order to meet their sustainable goals. It also focuses about various challenges faced by the banking sector in their transition to green banking mode. The study also highlights on Indian green banking progress from 2011 to 2021 and also its contribution to the world ecological balance.

The study is conducted for a period of more than a decade which is sourced by secondary data from various printed and internet sources. . The study contains data regarding top 15 banks thematic strategies to attain their sustainable goals, The study also reveals world's new energy investment landscape distribution for more than two decades (2014 to 2035). It also talks about percentage of green finance done by public and private sectors in Indian economy. The researcher has also made an attempt to study the customer's transition from traditional banking services to green banking services which will have greater impact on their performance and also helps to create brand image.

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**Keywords:** Digital Economy, Green banking, financial institution, climate,

### **Introduction:**

Green banking is one of the strategies used to meet the sustainable development goals. Every bank in India is striving hard to indulge in green transition plans to reduce carbon foot prints which gauge their impact on the environment and to promote eco-friendly products which help to build a more responsible finance industry. It indirectly helps clients to change their banking habits from branch banking to online banking. SBI was the first bank to adopt green banking technology by using energy projects they tried to use wind mill for the energy consumption. In the global scenario Green banking was started in the year 2003 by Citigroup Inc, The Royal Bank of Scotland with Equator principles (Eps) . In India Atiur Rahman was first governor who introduced green banking policy and guidelines in the year 2011 , so he was popularly known as green governor.

### **History of Green Banking and Global Green Banking Award**

The Finnish bank, Bank of Aland was awarded for their green banking goal. It is the small bank which is situated near Baltic sea, innovated Baltic sea credit card and Aland index which gives data regarding market situation, risk analysis and very importantly customer carbon footprint of individual transaction which will be displayed on their mobiles as monthly statement through unique calculator by using Aland index which made the customers to be very cautious in selecting their product and making payment through Baltic credit card.

It also made a strategy to offset carbon footprints and to bring change in the customer behavior by giving them opportunity to make up for their carbon footprints by paying more amount during their credit card payment.

They also connected every retail merchant unique code to the master card to find out customer carbon footprint and tried to assess their harm to environment through Aland index and gave opportunity for the customers to offset their damage, these actions of Aland Bank paved a way for new customer acquisition and it also served as a catalyst in creating new ideas to save the world from ecological imbalance. Indian Banks have committed themselves to achieve 'net zero' by 2070 and they are stepping towards carbon neutral which results in no net addition carbon dioxide into the enviroins.

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Green Banking is the part of sustainable development, World bank groups have launched sustainable finance awards for institutions that are integrating social, environmental and corporate governance into their business operations

5 Categories of awards are:

1. Sustainable bank of year
2. Technology in sustainable finance
3. Sustainable investment of the year
4. Sustainable investor of the year
5. Achievement of inclusive business

### **Need for Green Banking**

Banking sector plays a important role in the economic development of the country it indirectly helps in the capital formation for the country. It also provides its supporting hands to the society through leveraging its funds in clean energy projects, green investment projects (renewable energy projects) which is a need of an hour. Green banking mainly focus on reducing their operational cost, financing fin-tech technology to meet the requirement of the changing client attitudes which helps them to survive in the banking industry for a long period of time without affecting the ecology and helps to substantiate their brand image for a long period of time

### **Review of Literature:**

**Hyoungkun park and Jong Dae Kim** Transition towards green banking: Role of financial regulators and financial institutions: The paper gives insight about various business opportunities for banking sector. It also talks about Central Banks initiative to mitigate negative impacts of climate related risks by providing new policies to undertake green banking initiatives. The researcher has suggested that the developing countries should use more regulatory framework approach to promote green banking and the researcher has faced many challenges to design and develop criteria to measure performance due to lack of data availability.

**Ajaz Akbar mir, Aijaz Ahmad Bhat** – Green Banking and sustainability the study reveals the importance, methods of adoption of green banking practices. The conceptual paper reveals the

devasting effects of climatic changes and its impact on global warming which created an obligation for every business to create more sustainable world .

The researcher scrutinized various bank websites to know about green banking practices which is one of the sustainable goal and also tried to understand their contribution towards sustainability.

**Mohmad Aarif1 and Prof. Md. Faizanuiddin** -Green Banking: Benefits, Challenges and Opportunities in Indian Context under this study the researcher has made an attempt to understand green banking challenges and benefits in context to Indian banking sector.

The paper has also spoken about various regulatory authorities, customers, and employee's interest on the particular concept. The researcher has also concluded that India lacks behind in adopting green banking system which can be promoted by undertaking essential policy and initiative measures

### **OBJECTIVES:**

1. To understand the concept of green banking practices.
2. To examine various strategies adopted by green banks to achieve their sustainable goals.
3. To study various opportunities and challenges faced by the banks in their transition towards green banking.

### **RESEARCH METHODOLOGY:**

In the above research paper, Descriptive method or technique is used to analyze the information through using various secondary data sources which includes newspaper, websites, E-Journals, research articles, Research journals.

### **RESEARCH GAP:**

The study focuses on various challenges faced by the banks in adopting green banking strategy to mitigate carbon foot prints and to attain other sustainable goals and also to meet ESG standards so that it can increase its brand image which will have major impact on their performance pattern.

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### Limitation of the study:

The study is conducted for a period of one decade and there is more scope for the future study by considering many other factors like impact of green banking on its employees, bank performance and also they can study the mindset of the present customers and their satisfaction level in usage of green banking products. As it is emerging topic it was not possible for the researcher to find out the returns on these products but in the future study they can also find ROI on these investments based on some of the globally accepted indices.

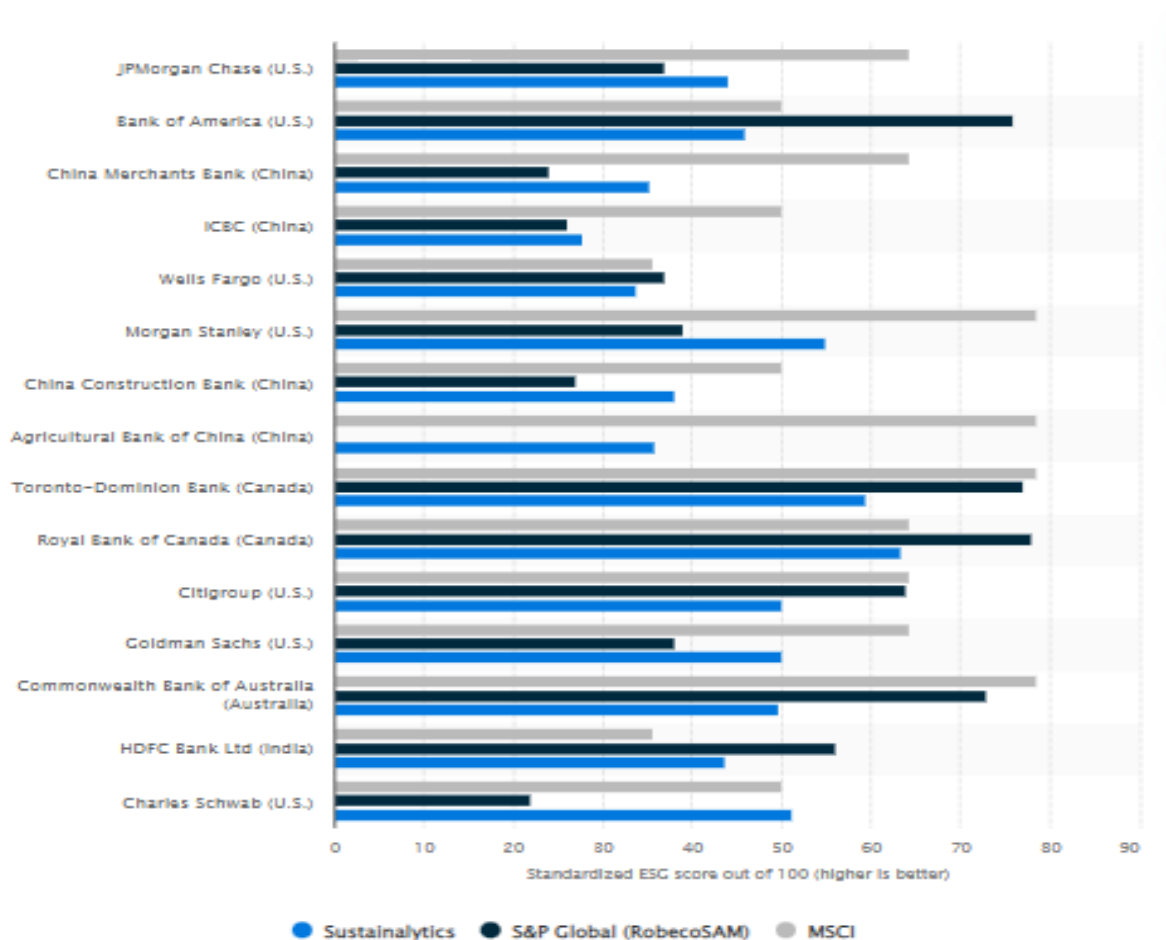
### Comparison of the ESG scores of 15 largest Banks by market capitalization worldwide in 2021, by ESG score provider.

Sl. No	NAME OF THE BANKS	MSCI	S&P global (Robeco SAM)	Sustainalytics
1	JP MORGAN CHASE	64.3	37	44
2	Bank of America	50	76	46
3	China merchant Banks	64.3	24	35.2
4	ICBC	50	26	27.8
5	Wells Fargo	35.7	37	33.8
6	Morgan Stanley	78.6	39	55
7	china construction Bank	50	27	38
8	Agriculture Bank of china	78.6		35.8
9	Toronto -Dominion Bank	78.6	77	59.4
10	Royal bank of canada	64.3	78	63.4
11	Citi group	64.3	64	50
12	Goldman sacs	64.3	38	50
13	common wealth of Australia	78.6	73	49.6
14	HDFC Bank Ltd	35.7	56	43.6
15	Charles Schwab	50	22	51.2

source: Statista research development :iune 14. 2022 and the table was framed by the researcher.



Table 1.1 ESG scores of top 15 banks of the world shown in bar diagram

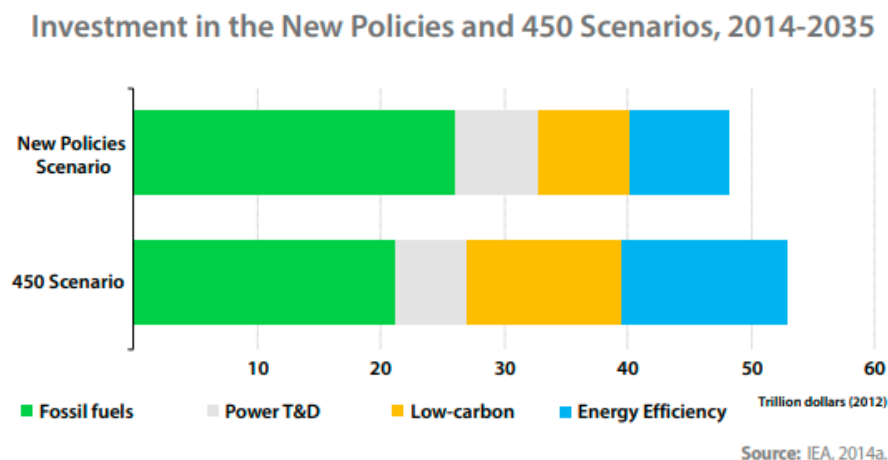


From the above table we can analyze that Royal bank of Canada with less market capitalization of 64.3 is trying to invest more on sustainable projects and has also created many sustainable thematic strategies to attain the sustainable goals with S&P and sustainalytics score of 78 and 63.4 out of 100 when compare to other top banks in the world.

Toronto- Dominion Bank and Morgan Stanley stands in the second and third position in their sustainable investment strategies and their investments on ecological and sustainable projects.

Fig 1.2 WORLD Investment landscape in new energy projects

FIGURE 1. A NEW ENERGY INVESTMENT LANDSCAPE FOR A 2°C WORLD



From the above diagram we can get to know the portfolio distribution of the investments and the world strategy to meet the sustainable goals. The investment policy landscape distribution is shown for a period of more than two decades. From the chart we can get to know that the world is trying to concentrate more on usage of fossil fuels.

### Green -Banking products

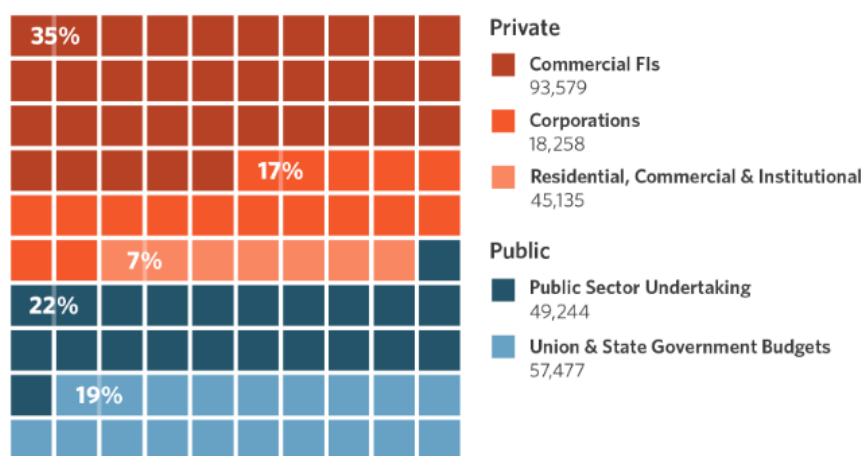
- a) Green Loans :
- b) Green CD's
- c) Green Mortgages
- d) Online banking
- e) Mobile banking
- f) Green credit cards

1. **Green Loans:** Green loans are also called as green financing where bankers will invest in green projects. It helps to increase the level of financial support from

2. Different sectors like banking, microfinance, insurance sector etc to the society and which can be used for sustainable projects.

**Fig1.3 Green Finance ratio of public and Private sectors of Indian economy**

Figure 5: Domestic green finance by public and private sources (INR thousand crores)



From the above diagram we can get to know the percentage of green finance made by both private and public sector undertakings. The above diagram depicts that 59% of green finance is done by private sector and 41% of green finance done by public sector for the particular year.

3. Green CD's: Green CDs are nothing but green certificate of deposits where customers are given wide range of choice to invest their money in sustainable projects for which they will get fixed rate of interest.

The time period for green CD's varies for 7days to 5 years. Transparency reporting and proper screening criteria will attract sustainable investors and it's a responsibility of the bankers to provide these data to their clients on regular intervals.

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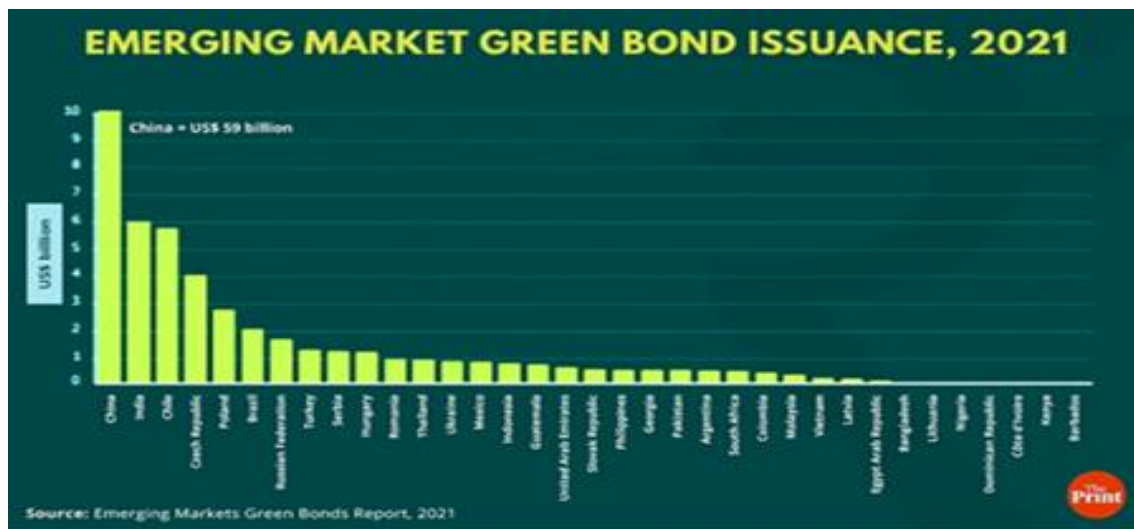
Fig 1.4 Data about few countries meet the mile stones in green financing



**Source:** Climate bonds initiative climate bond. Net

The above diagram we can get to know about the milestone of each country in green investments. It also talks about various countries growth and their investments in various green projects so that they can meet the pre-determined sustainable objectives.

Fig 1.5 Emerging Indian Green bond issuance 2021



Graphic by Ramandeep Kaur, ThePrint

**Source:** Climate bonds initiative climate bond. Net

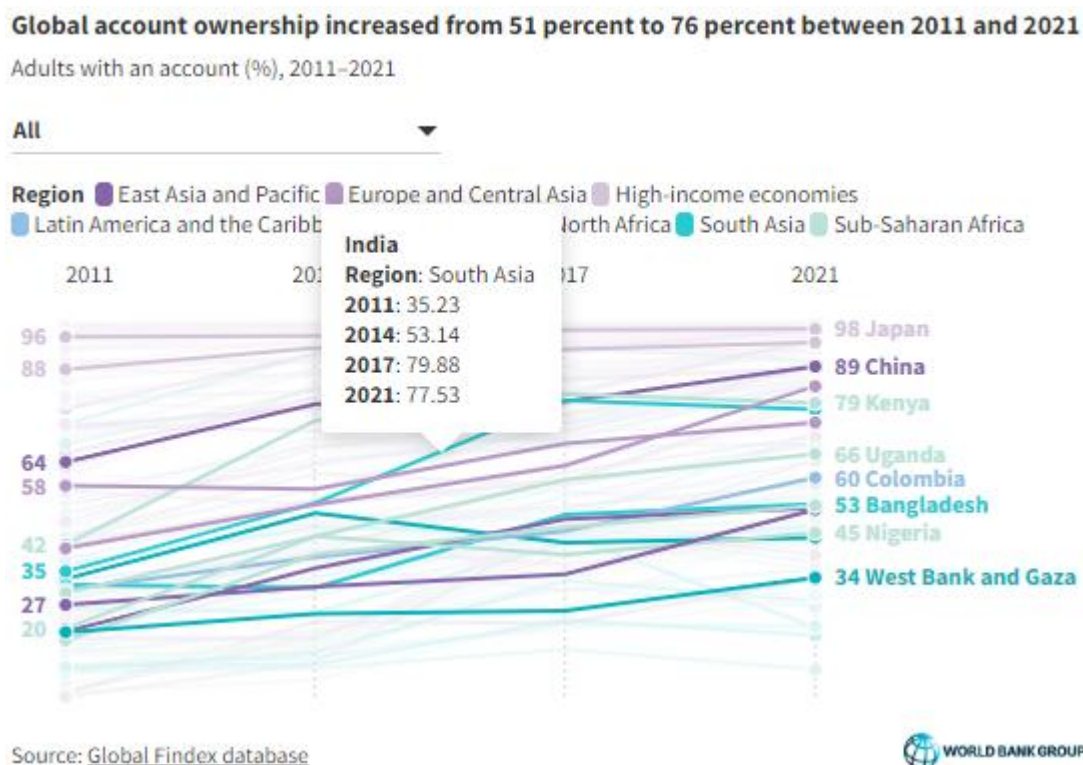
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From the above bar diagram we can get to know about world's green bond issuance market in which India stands in the second place after china in the issuance of green bonds which is one of the milestone but still being 5<sup>th</sup> largest economy in the world we need to contribute more to the world's economy in a sustainable manner.

3) Online Banking: online banking will help customer to access your bank account without visiting your branches and the services are extended for the payment of online bills, online transfers, auto payments, transferring money etc.

Online banking plays very important role in transition from branch banking to neo banking. Neo banking gives a platform for a customer to open account, take loans and other banking related services sitting in one corner of the room which obviously increases increase the satisfaction level of the customers.

Fig 1.6 global data about online usage done by top few countries



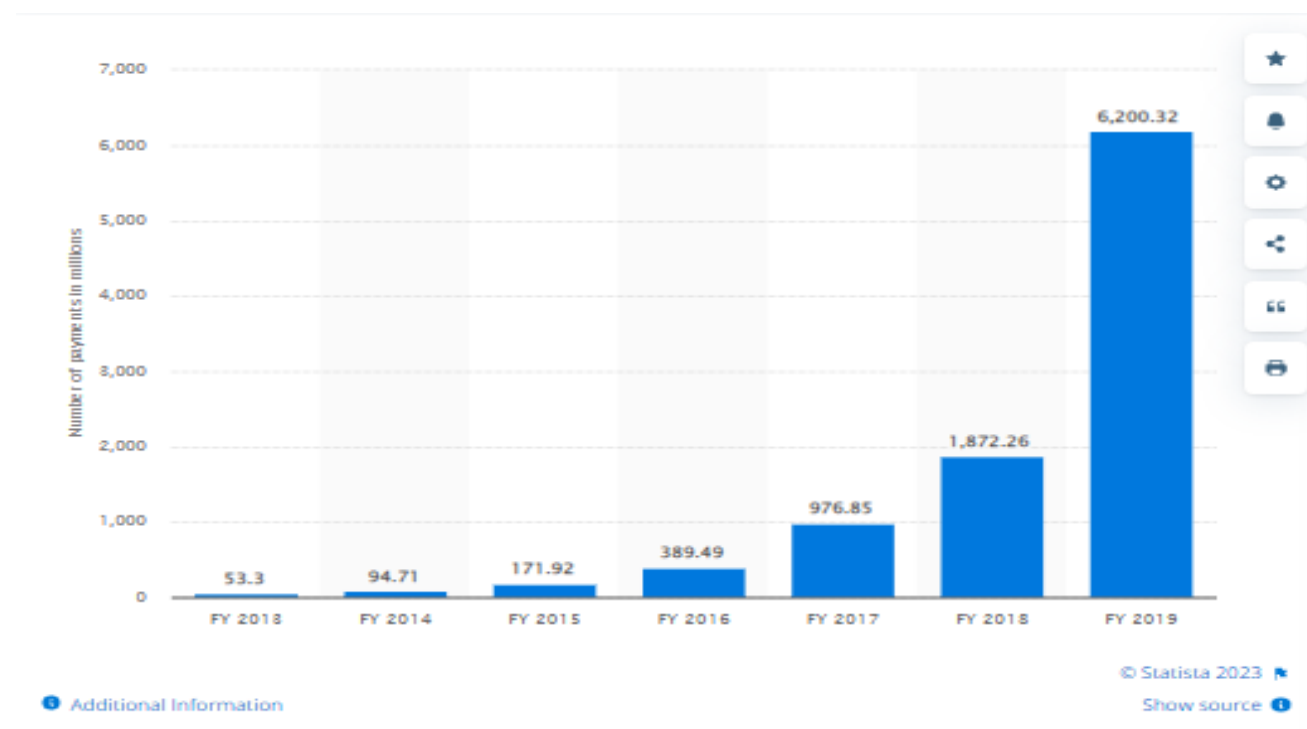
**Source:** Global findex database

## Growing Infrastructure A key to Transforming Indian Economy

From the above line graph we can find out the transition of customer access to online banking business from 2011 to 2021 . Japan stands first in the online usage. Indian customers online usage has drastically increased from 35.23 in 2011 to 79.88 in 2017 but we can find slight decline in the usage in the year 2021 from 79.88 to 77.53.

4) Mobile Banking: It's a service provided to the customers by banks and other financial institutions where in the customers can use their mobile phone for all their banking transactions remotely its usually available 24 hrs basis.

Fig 1.7 Number of Mobile banking payments across India from Financial year 2013 to 2019



Source: Statista2023

From to the above bar diagram we can find that there is a drastic increase in the mobile banking users in India. The usage has increased to 6 billion. This tremendous increase is due to pandemic and made the customers to rely more on mobile banking.

This requirement gave a pathway for the third party apps to create new modes of payments and helped the customers in their transition.

### 1.8 Benefits of Green Banking Practices



**Source:** Academy of entrepreneurship journal

### Challenges faced by the Banks in their transition from normal Banks to Green Banks

1. Increase in the cost of operation: It became very difficult for the banks to rely on the technology to mitigate their carbon foot print which indirectly insisted the banks to finance for new fin-tech technologies.
2. Any adoption to the new pattern of system will initially increase their fixed capital which will take long time to recover their finance.
3. Upskilling the employees: Banks has to invest more money on training their employees to enhance their skills and it also has to pay more money for the technology if it is borrowed ones.
4. Security threats: It is very difficult to gain the confidence of the customers in using online or mobile banking service which needs special care and concentration on securing their private data.

### Findings and Conclusion:

As India is the fifth largest economy in the world with second highest population it is very important to investment on green growth projects which ensure potential usage of natural resources in a more economical way, which is possible by giving necessary targets to the banks and other financial institutions to invest only on go green projects. Similar to the Baltic sea projects the developed and developing should formulate their own sustainable index where in all merchants unique code should be connected and customers impact on carbon footprints information should be timely identified and sent to the customers mobile phones and they should be made responsible for their damage.

### Bibliography

- Academy of entrepreneurship journal: Az Akbar Mir and Aijaz Ahmad Bhat –green banking and sustainability- a review Climate bond.net
- Global findex database
- Hesanzahid Customer awareness on Green banking practices IEA@23
- Meenakshi Sharma Green banking initiatives: a qualitative study on Indian banking sector
- Mohamad Aarif1 and Prof. Md. Faizanuddin -Green Banking: Benefits, Challenges and Opportunities in Indian Context
- Jing cheng and ABU BakarThe Effect of Green Banking Practices on Banks' Environmental Performance and Green Financing: An Empirical Study
- S.katyal role of green banking in sustainable developement
- Stastista research development
- www. google .com
- H AhujaGreen banking – A review of literature Soniya Impact of green banking in India



## **Cashless Economy and Digitalization: Opportunities and Challenges in India**

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### **Abstract**

Cashless economy and digitalization mean an economy in which the transactions are done through digital payment platform (i.e. UPI, BHIM App, net banking, mobile wallets, mobile banking).

After demonetization in India, it forced all the consumers and companies to adopt and create cashless and digitalized economy. This study considers the factors affecting the people to switch to digital payment platform to make our economy as cashless.

The research collected data from 150 respondents living in India, experiencing digital payments and online transaction. The data collected through questionnaire and analyzed statistically. The study illustrates that there is lack of knowledge and awareness regarding usage of digital payment platforms.

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**Key words:** Cashless economy, financial inclusion, electronic payment.

### **Introduction**

In an economy money plays an important role. Money have changed its form many times from cowrie shells and other items from nature, counterfeiting, coins, leather money, paper money, gold standards, plastic cards and now virtual currency.

At present Indian economy is moving towards cashless economy through digitalization. This is a recently introduced concept (i.e., after demonetisation) as everyone are switching to smart phones and slowly getting exposed to digital world.

The digital world exposure created a great impact on growing demand by customer for innovation and government's initiatives to regulate and limit the flow of cash and leading India's path towards a cashless economy.

In the financial year 2013-14 the number of 254.5crore digital transaction was done. In 2016-17 the number of 865.9crore digital transaction across all banking platform. Digital payment modes processed Rs 23.06 billion (2300 crore) in volume and Rs 38.32 trillion (38.3 lakh crore) in values in the third quarter of 2022 as per Worldline India's 'Digital Payment Report'.

The RBI on June 17 came out with its "Payment Vision 2025" (with the core theme "E payment for everyone, everywhere, every time) document which seeks a three-fold jump in the number of digital payment progressive and aims to establish India as a powerhouse of payment globally, opined players.

Recently India launched its e-Rupee on December 1<sup>st</sup> 2022. The Reserve Bank of India's *Central Bank Digital Currency* (CBCD) is an electronic version of cash and will be primarily meant for retail transactions.

The pilot will initially cover the four cities of Mumbai, New Delhi, Bengaluru, and Bhubaneshwar. Four banks will be involved in the controlled launch of the digital currency in these four cities: State Bank of India, ICICI Bank, Yes Bank, and IDFC Bank.

### **Objective**

To study the opportunities and challenges of cashless economy and digitalization in India

### Various concepts

#### Cashless Economy

Cashless economy means an economy in which transactions are done using plastic cards, cheques, NEFT, net banking, mobile banking & by using third party apps (i.e., phone pay, g-pay etc) and where in physical money transaction takes place.

#### Digital Economy

Digital economy means all the economic activities are carried out by using electronic devices and make the activities as paperless.

#### Mode of cashless transaction

1. Net banking: Net Banking is different is different from how cards and wallets work; it is a mode of transfer of money from one bank account to another. Before using wallets and UPIs net banking was a popular way to transfer funds, and is still widely used.  
By using net banking, you can log on to your bank account using internet and transfer funds through Real-time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT), and Immediate Payment Service (IMPS). And all these transactions can be done with minimal cost.
2. Aadhar Enabled Payment System: AePS is a bank led model which allows online interoperable financial inclusion transaction at PoS (Micro ATM) through the Business correspondent of any bank using the Aadhaar authentication. AePS allows you to do six types of transactions (Cash deposit, Cash withdrawal, Balance enquiry, Mini statement, Aadhaar to Aadhaar fund transfer, Authentication, BHIM Aadhaar pay).
3. Mobile wallets: Mobile wallets are a virtual wallet that you can access with the help of your Smartphone, and it acts as a payment gateway for all your payment transactions.
4. SMS based mobile banking: Mobile banking over SMS is known as SMS banking.
5. Plastic Money: A plastic card includes different categories of cards such as debit cards, credit cards, and prepaid cards, in both physical and virtual forms. Capitalist economies in the world have been thriving on it for years know.

### Advantages of Cashless Economy

➤ ***Transparency in the system***

A major benefit is it ensures transparency and accountability in the monetary system. Its also help the bankers to trace the flow of money of a customer and finally help to reduce the fraudulent activities and crimes such as tax evasion, corruption.

➤ ***Convenience***

In accordance to the core theme of 'Payment vision 2025' it is easy to use anywhere, any time and which helps to save time too.

➤ ***Reduce cash related crimes***

If there is rigid implementation of digitalization it helps to demolish to maximum extent of unethical and illegal activities such as counterfeit money, black money.

➤ ***International transaction***

We can make the international transaction easily without time constraint. And improve our international trade relationship easily.

➤ ***Reduce the cost of currency production***

If everything moves digital then the cost of printing notes and mint the coins reduces which helps to invest those funds into some other productive activity.

### Disadvantage of Cashless Economy

➤ ***Cyber security***, There is a chance for attack through malicious on computer or any other electronic device and network which may result in unauthorised login to the accounts we use.

➤ ***Rise in public expenditure***, Public start to spend more and it slowly changes the buying behaviour or pattern of the public which results in no saving mentality and move towards exhibiting their luxury to others.

➤ ***Identity theft***, If there is lack of financial knowledge and digital knowledge anybody can access their account easily and make them fool without the knowledge of that particular person.

➤ ***Illiteracy***, Still there are some regions, where the education has not reached to that extent where people can use the electronic devices and network for their day-to-day requirement.

### *Government Initiation towards Digital India*

The government is taking several steps to overcome the above challenges and establish a cashless economy. Let's understand more about this initiative:

- **Demonetization**

The government implement demonization in 2016 to curb the circulation of black money. Demonetization was one of the most radical steps taken in this direction. This initiative significantly reduced availability of liquid cash and pushed people towards opting cashless modes like plastic money, digital wallet, and also led to a sharp spike in online sales.

- **Pradhan Mantri Jan Dhan Yojana**

Financial inclusion is one of the primary reasons why India is unable to develop rapidly. Addressing this cause the Pradhan Mantri Jan Dhan Yojana was one the most renowned and successful initiatives by the Government, to eliminate the challenges of financial inclusivity across the Country. The aim was to offer banking to each household, by allowing them access to all services such as bank accounts, credit facilities, pensions, and more.

- **Direct Benefit Transfer (DBT)**

The DBT scheme was launched to provide financial benefits to individuals, such as subsidies directly in the beneficiaries' bank accounts. This included benefits such as LPG subsidies, old age pensions, and scholarships, helping the rural population to move towards the digital system efficiently. This encouraged people to entrust banks with their money, while also addressing concerns of financial knowledge and literacy.

- **Financial Literacy Centres**

Lastly, as part of the Pradhan Mantri Jan Dhan Yojana, financial education programs were also held in Government-led literacy centres. These centres aimed to educate more people in the country regarding the benefits of a cashless economy for the community

These government initiatives combined, have helped the country reach noteworthy milestones in terms of financial digitalization and national goal of a cashless economy.

### Challenges in transforming India to cashless economy

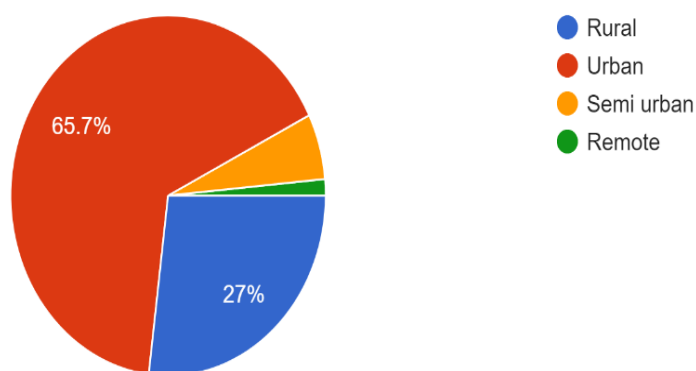
Based on responses we received from our respondents the list of challenges that India is facing right now are as follows:

1. **Security threat:** There is existence of threats toward their privacy and security of users.
2. **Network issues:** Still there are no proper networks available in the remote areas of our country and there is server is either from bank network or from the user side as well.
3. **Lack of awareness:** till now there many people who are unaware of the concept called cashless economy and digitalization.
4. **Literacy:** India has not yet achieved its 100% literacy and there many people in need of education.
5. **Negligence to upgrade cashless:** Many educated fellows hesitate to use digital payment platform due to their negligence.
6. **Lack of smart phone availability:** There are people who cannot have the ability to get accessibility to smart phones too.

### Research findings and Analysis Survey

where you live?

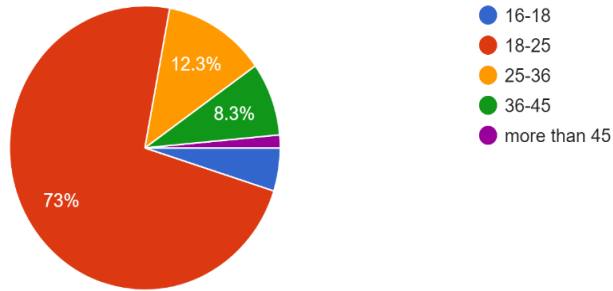
204 responses



# Growing Infrastructure A key to Transforming Indian Economy

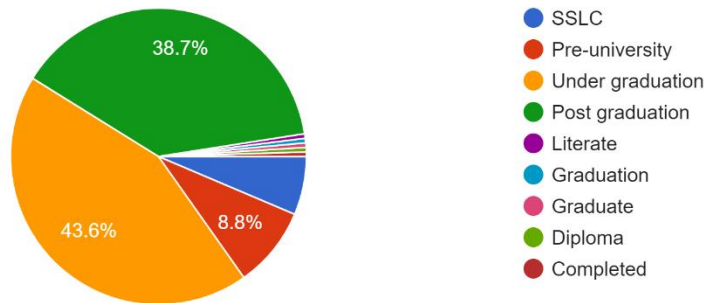
## Age

204 responses



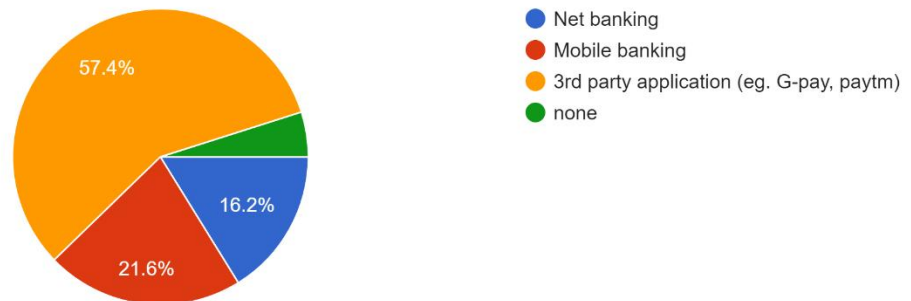
## Education

204 responses



## which digital mode you use for transactions?

204 responses

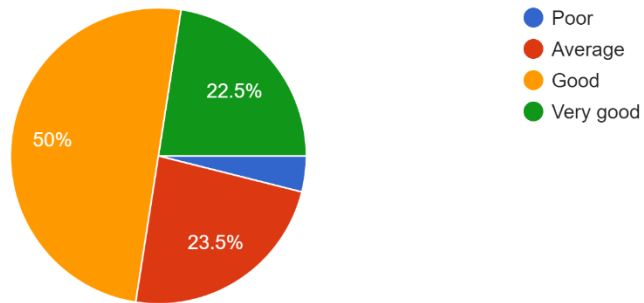


## Growing Infrastructure A key to Transforming Indian Economy

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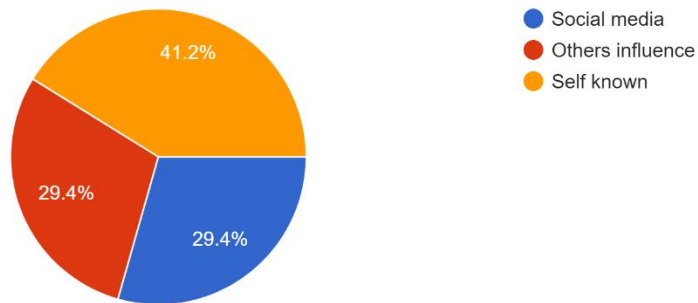
How well-versed are you in making digital payments?

204 responses



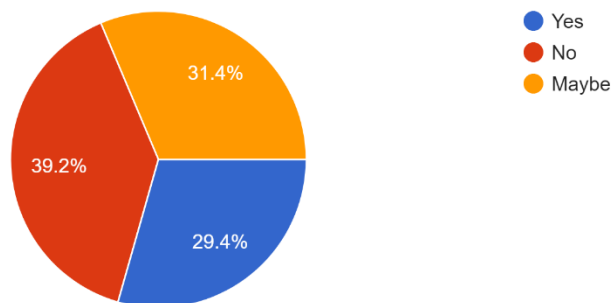
How did you come to know about the digital payment?

204 responses



Will you prefer to carry hard cash in hand all the time?

204 responses



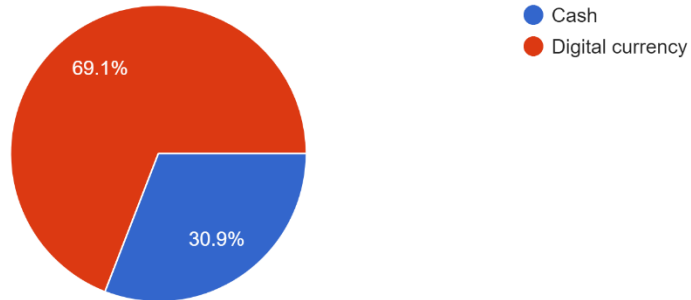


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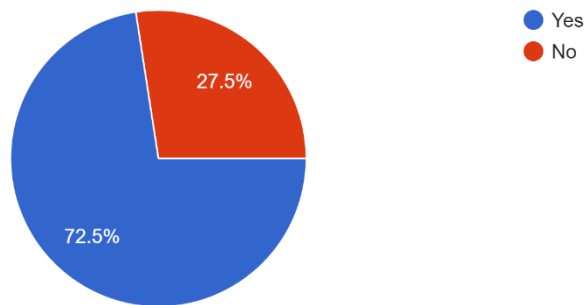
In which form you like to keep your savings?

204 responses



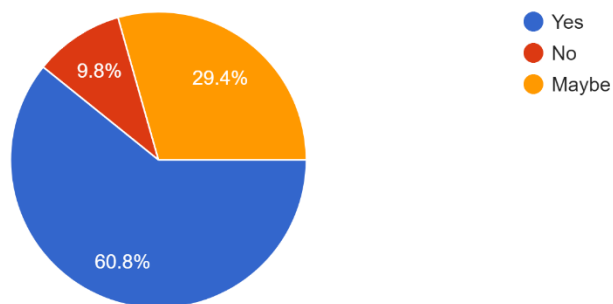
Does all your family members aware of using digital payment?

204 responses



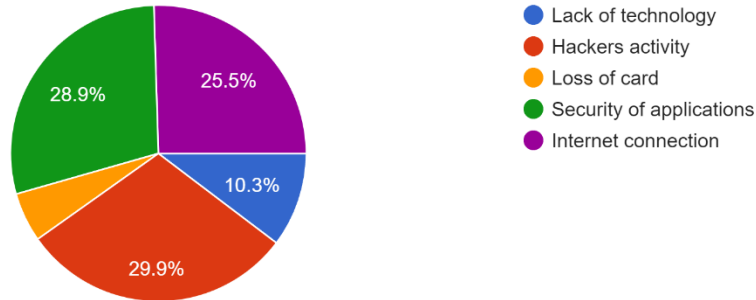
Do you think cashless transactions are more convenient than cash transactions

204 responses



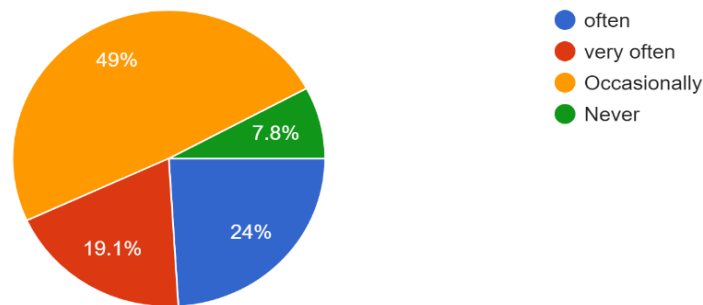
what hesitates you more to switch to cashless transactions ?

204 responses



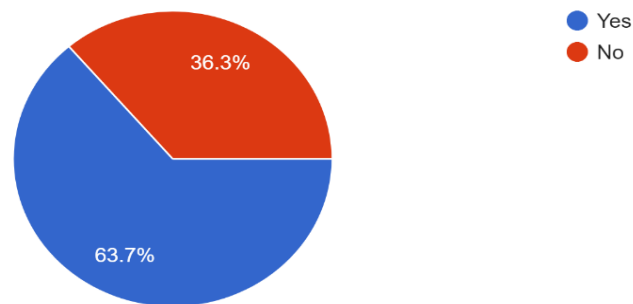
How often you use your Debit card and Credit card for making payment

204 responses



Are you aware of e-rupee?

204 responses



### **Conclusion**

We can conclude that there is a long way for India to become a cashless economy. People still lack trust and confidence while using digital payment methods. A lot of development in the field of infrastructure is required to make the dream of Digital India a reality. There are many people who are still not aware about the cashless economy not only in India but outside of India.

Government has faced a lot of criticism in the past from the public for the various plans implemented on the public. There are a lot of challenges in fulfilling the dream of digital India but in the long run cashless economy will help in growth and will bring a lot of benefits and opportunities with it.

The future of the cashless India looks pretty promising as the response of the country people towards this move of the government and the support towards it is a clear indication that the government's move is likely to succeed.

The transparency in the economy will increase through the e-commerce transactions and the digital payment gateways which will increase the GDP of the economy. This will increase the credibility of the country and make a rise in investments. This step of cashless is truly going to create ripples of big success and it will help to attain vision of Prime Minister Modi's vision of Digital India.

A Cashless economy is a situation in which all the financial transactions and made by digital means rather than physical currencies. After demonetisation the country is moving towards the cashless economy. To encourage the move towards the cashless transaction the government has come up with a special discounts and freebies on digital transactions. From the study, it is observed that much has already been aware of cashless economy and that a sizeable proportion of the people are actually awaiting the introduction of the cashless economy. The result revealed that the cashless economy has a positive impact on prevention of money laundering and stimulation of economic growth.

Indian economy is primarily to be driven by the use of cash and less than 5% of all payments happen electronically. This is largely due to the lack of access to the formal banking system for a large part of the population and as well as cash being the only means available for many. Large and small transactions continue to be carried out via cash. Even those who can use electronic

## **Growing Infrastructure A key to Transforming Indian Economy**

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payments, use cash. Indians traditionally prefer to spend and save in cash and a vast majority of the more-than 1.2 billion population doesn't even have a bank account. Indian economy is primarily driven by the informal sector and it relies heavily on cash-based transactions.

The main goal of current research was to ascertain the potential of Indian economy tend towards cashless. India has huge capacity for development through man, material, natural resources, generating and adopting new way and thoughts. Due to various factors discussed in the paper, it is found that Indian economy is developing. It's GDP is among first top ten countries. It is tended to be cash to cashless. It has great potential for moving towards cashless.

### **Reference:**

Digital payment driving India towards cashless economy

<https://timesofindia.indiatimes.com>

Cashless Economy-One Step of Digital India

<https://www.met.edu>

<https://www.npci.org.in>

<https://koreascience.kr>

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**SUSTAINABLE INFRASTRUCTURE FOR SUSTAINABLE  
DEVELOPMENT & EASE OF LIVING**

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**Abstract:**

The amplification of human attempts spanning over innumerable civilizations & sociological advances in a vivid attempt to simplify different aspects of life & human activities is deeply connected to the need & idea of augmenting infrastructural capacities in various forms of existence. From land to air & oceans to rivers man has consistently tried to make living & accessibility better, scalable, affordable & sustainable.

This study is a humble attempt to understand

- A) Infrastructure & economic development how they are hinged & are critical in transforming Indian economy.
- B) How a robust infrastructure can lead to ZERO-BOTTLE NECKS in Supply chains.
- C) Government & its plan to achieve the Developed nation status & how infrastructure can fuel growth, employability & scale up capital formation.
- D) Challenges in transport management-future outlook for prudent management of existing infrastructure, movement of goods & hassle-free commuting in line with international standards.

E) Technological



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## Growing Infrastructure A key to Transforming Indian Economy

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Objective 1: Infrastructure & economic development how they are hinged & are critical in transforming Indian economy.

**Introduction:** Infrastructure is the essential & important to a country's dream to attain the pinnacle of economic prosperity & development. Goods are produced, Marketed & sold in a country & outside. People travel for their employment, entertainment, leisure, education socio-cultural engagements & other requirements on a frequent basis. India has enormous challenges as it has a huge population & per square kilometer density is getting more & more, adequate infrastructure is inevitable for an efficient transit system & ease of living.

Infrastructure is not just physical structures it is the science behind a nations progress & development, any country would want its education, health, defense,

The size of India Infrastructure Sector market is USD 680 Billion in the current year and is anticipated to register a CAGR of over 8.2% during the forecast period, Which clearly signals at a shift in government policy, as there is a growing competition emerging from countries like China, Brazil ,Taiwan ,Japan ,Russia ,France ,Israel, gulf nations its becoming extremely important for nations to put their infrastructure spruced up with modern technology & constant adaptation to new innovations as supply chains have been built ,operated & overhauled/restructured from time to time as per the varying demands of the society.

In a multi-polar world where there are climate changes and or emission target challenges, environmental/degradation challenges, war related supply chain disruptions, undue cost escalations, biggest problem of all the population explosion challenge, food crisis around the world, and problems of solid waste management. Death's due to inadequate medical facility & poor accessibility to remote & tribal dwellings in deep forest areas, farfetched islands, mountains etc, The world & its leaders aspire to take development to the remotest citizen on this planet , united nations have drawn various programs which profoundly profess & advocate strong implementation of sustainable development goals by instituting them in the local & central governance machinery. These goals are fully capable of meeting international infrastructural upheaval aspiration programmes of different countries across the following:

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## **Growing Infrastructure A key to Transforming Indian Economy**

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1. Social Infrastructure
2. Transportation Infrastructure
3. Extraction Infrastructure
4. Manufacturing Infrastructure
5. Utilities Infrastructure

A nation's infra can be broadly classified into five categories as mentioned above, as we are aware a country's survival, growth & prosperity is always relying & dependent on its resources & how it can mobilize these resources by combining them to make a finished product and or services there by yielding some economic activity, while we try to derive this we also parallel self-impose cost on ourselves which apparently plays havoc in our life in the form of various health & occupational hazards. With sustainable infra solutions & developments by usage of clean energy, reusable, recyclable, reducible, clean fuels we will move towards a more sustainable plant.

### **Railways:**

The railways are like the blood veins of a country's economic structure, they are highly cost effective and are safe, quick method of moving the goods covering even the remotest areas of the country. As our country's rail network spans from north to south & east to west. World class fleet management optional & cheap travel across categories makes it more favourable choice for all classes. From business to leisure, traditional to adventurous tours you name it they have it.

For business & industry on time movement of finished goods to next points are very critical as in today's world lead times are very minutely planned. Railways ensure fast & safe delivery.

In today's era of social media consumers are given world class passenger amenities at affordable travel rates

One of the important Mode of Transit is Railways India has 68043 route length Km of rail network one of the largest in the world it has both passenger & goods fleet both diesel & electric loco-Majorly moving towards CLEAN ENERGY of Electricity.

Line conversions are underway in different zones which operate under the ministry. There are mainly 19 zones in railways. It carried 808.6 corer passengers in 2022. 13000 passengers & 7400

## **Growing Infrastructure A key to Transforming Indian Economy**

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mail express trains. It also has a well-planned freight corridor & good shipment system more than 8479 trains are pressed to move the goods of the country. India is trying to implement best practices from its friendly countries. We are about to get a 300 KMPH speed train which will be started on a pilot basis from Mumbai to Ahmedabad. Likewise, the vande Bharat has replaced the Rajdhani gradually, new induction paving way for new Technology for better experience & safety. The government is using best technology not only for speed but for anti-collision as well.

Railways are a great source of employment from a modest tea vendor to a restraint in platform, a railway employee to a contractual worker everybody get their share for their contribution.

**Airways:** airways in India off late have become extremely popular among travellers for two reasons 1) Connectivity 2) affordability.

Middle class commuters who use to do away from choosing airlines for travel have shown a paradigm shift they have conveniently done so as it saves lot of time if you travel by airlines. Better amenities, high class airports, excellent lounges have made them much more luxurious at affordable prices.

India is a home to 140 plus airports. The government has increased the number by two folds to penetrate deep into CAT-A & CAT-B cities thereby reaching out to larger consumers also continuing the same initiative it also intends to multiply its cargo carrying capacity which is another important element of airways helping in quick & fast movement of goods.

Boeing recently bagged a huge order from air India, both Boeing & airbus are predicting India to have approx. 1700 carriers and India to lead aircraft demand.

The current domestic fleet of passengers is 100 million domestic & 31 million international which is going to grow 20 % annually.

Hence there is a pressing need to augment the overall capacities from the point of view of CARGO & PASSENGER FLEET. It should be an ongoing process as a growing economy does have a real cascading demand of airline services across length & breadth.

**Roadways:** the most important constituent of infra is the roadways in India we have rural roads & urban roads. Urban roads also have interior within the town or city roads. The country sees



## **Growing Infrastructure A key to Transforming Indian Economy**

highest amount of vehicular traffic after China & USA. With such high intensity traffic & also ever-growing towns, cities. The exercise of urban development becomes of prime issue related to infrastructure & urban development. Local urban authorities are vested with enough powers to plan , execute & oversee developmental requirements.

Street light, sanitation, parks, roads, Road Maintenance are the prerogative of local municipal & corporation. Villages get roads under the central schemes or state-run programs but India's connectivity largely remains on the roadways which is the bed rock of Indian growing economy. Although not in a good state but these is the economy. State-run products, Agri products, silk, cotton etc all are carried through this robust network of 6000000 km of total roads we have summing up all categories.

Modernisation efforts are underway in a big way we are running projects like bharatmala,it connects major highways to major ports in India helping to build a huge SCM infrastructure for export -import.

The golden quadrilateral road, Sagar Mala project connecting major ports, the east west corridor, the Mysore Bangalore express way, Mumbai-Delhi express way, Noida-Muzzafarpur express way. All these projects are being planned at a high speed executed the same way Highways both state & national are seeing a transformational change. In India we have 5 km approx. for every 1000 people which need to go up.

**Waterways** : India is a sub-continent surrounded by three side water which can be a game changer in the way India can do business with the world & that too in a sustainable way. Apart from this we have many important rivers where we can build water corridors not only for transport but for tourism. We have 111 notified waterways in India is endowed with an extensive network of waterways in the form of rivers, canals, backwaters, creeks and a long coastline accessible through the seas and oceans. We have a coastline of 6100 km & an inland waterway of 14000 km in total. In my perspective the coastline of Indian sub-continent is flat & we don't require much infra erecting ports. Currently we have 12 major ports. The overall cost per nm in an ocean roughly works to 50 paise which is the lowest of all modes (wikipedia, n.d.)

**Objective 2: How a robust infrastructure can lead to ZERO-BOTTLE NECKS in Supply chains.**

## **Growing Infrastructure A key to Transforming Indian Economy**

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This government has given major push & impetus to MAKE IN INDIA, from defense to toys, organic fruits, vegetables to dairy products, Indian products, Indian products, Indian products, Indian, products, Indian tea, aluminum, steel, leather, meat, medicine.

Indian foreign trade is continuously on the rise with exports bettering imports bringing forex back to India, our BOP & BOT, currency reserves are touching heights. This can't be possible without excellent INFRA. We are investing in HR skills for better supply chain management,

Robust material sourcing & supply is possible only by using best quality concepts & practices which the world is also looking up to. Industry has shown prudence & phenomenal adjustability to the changing dynamic demands of consumers & suppliers. Quality is premium consumers are ready to pay for. Timely delivery has become a USP. Consumer retention is quite a job you constantly do. Artificial intelligence, Robotics, block chain, analytics, IOT & IDC MACHINE LEARNING & Automation.

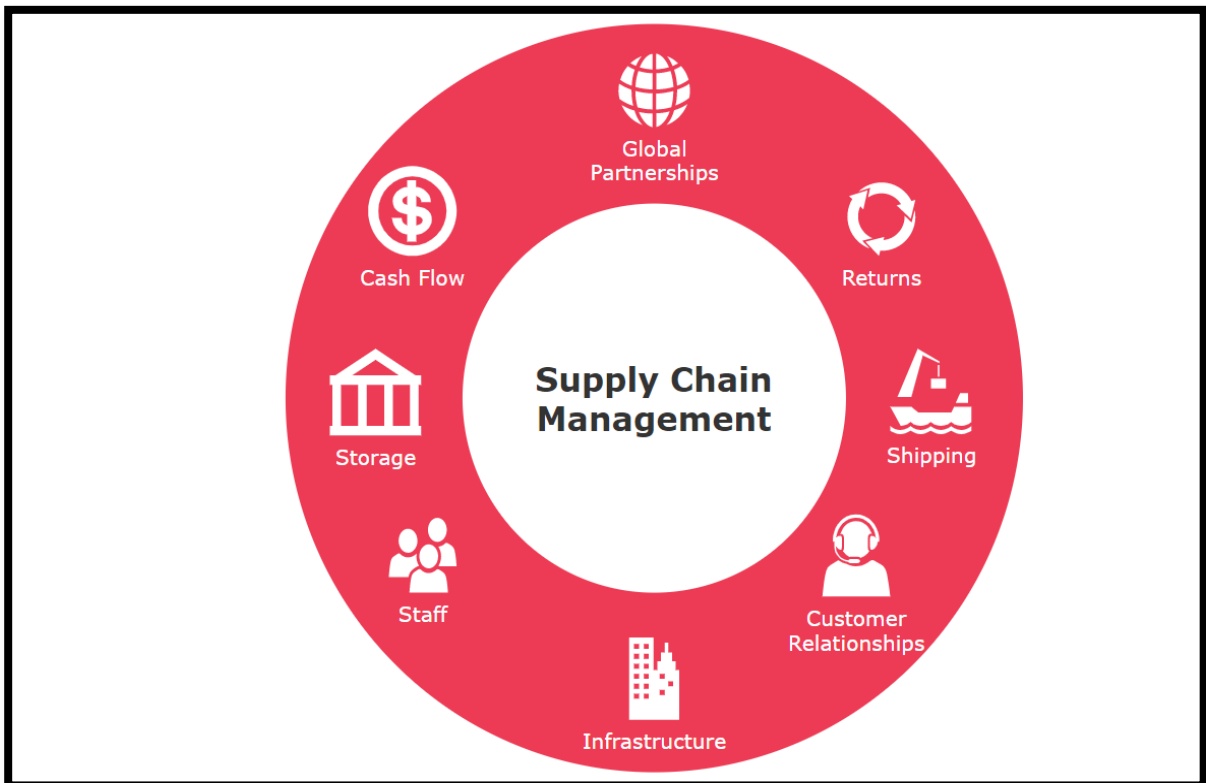
Major Indian companies are today well updated & have skilled Manpower to run their operation smoothly from the point of sourcing the raw material to customer delivery point everything is organized, structured & with a definite flow chart. As the below citation Explains e-com is approx. growing at 20 % online. Hence it becomes extremely important to have world class Infra & Order, Delivery & Feedback Mechanisms.

Global retail sales growth will continue to rise and take up more retail market share. According to research completed by e-Marketer and Statista, online retail sales will reach \$6.51 trillion by 2023, with ecommerce websites taking up 22.3% of total retail sales. (Global e-commerce explained stats & trends to watch, 2022). Retail being such a huge market our preparedness to handle high traffic orders efficiently becomes the critical point of infliction of our strategy with that of our global competitors. Resources & Responsiveness both can be the winning formula for a country like ours which aspires to be a global economic Superpower.

Supply chain service providers like Delhivery & Porter, freight bro, Black Buck In a booming retail economy where sellers & buyers meet online for Sale & Purchase companies like these

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acts as SCM facilitators. Some company's do the delivery part, some Provide vehicle Hiring Services & some even design Supply chains for big organization. Whatever it may be these companies as startups have made the most out of the retail boom & the growing infrastructure has made the jobs of these SCM organizations to Design & Implement their strategy very well.



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### INDIA A SWOT

<p><b><u>Strength</u></b></p> <ul style="list-style-type: none"> <li>➤ A democratic polity</li> <li>➤ Skilled hr</li> <li>➤ Tech hub of the world</li> <li>➤ Natural resources in abundance</li> <li>➤ Aspiring youth</li> <li>➤ Favourable international business relations</li> <li>➤ Connectivity -all means</li> <li>➤ World class education &amp; apprentice hubs</li> <li>➤ Improving land,water,air&amp; urban connectivity.</li> <li>➤ Start-ups flourishing</li> </ul>	<p><b><u>Weakness</u></b></p> <ul style="list-style-type: none"> <li>➤ High population</li> <li>➤ Low literacy rate</li> <li>➤ Rururban divide</li> <li>➤ Differentiated life style</li> <li>➤ Still a concern</li> </ul>
<ul style="list-style-type: none"> <li>➤ <b><u>Opportunity</u></b></li> <li>➤ All primary sector</li> <li>➤ Infra push</li> <li>➤ Heavy manufacturing</li> <li>➤ Second generation Agri revolution &amp; diary revolution.</li> </ul>	<p><b><u>Threat</u></b></p> <ul style="list-style-type: none"> <li>➤ China, ASEAN,EU,NATO as competitor.</li> <li>➤ Late starter &amp; infra development halt.</li> </ul>

Underlying Reason for India having a major Divide between urban & Rural markets. India has more than 6.6lakh villages & 760 districts, for 60 years post-independence we as a country never realised that the real India which is residing in remote towns and villages, the governments of yester years did make an effort to develop them but it was a failed attempt as one can consider India getting electrified completely only post 2016 as a testimony to the failure. India & its governance were deeply plagued by gross misappropriation & severe corruption. Money earmarked for development always landed up in the hands of merciless touts & commission agents. People were busy making money & the future of Indian villages was left to dis-Dain. In a scenario where governance took back seat politician rejoiced the loopholes of law perhaps a state of lawlessness. An era which India lost to China a neighbouring equal at that time It took a

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strong resolve of the rural masses to bring about a change in the country as we now envision the growth of India by integrating RURABAN INDIA- An idea of aligning the rural to urban.

- Pradhan Mantri Gram Sadako Yojana (PMGSY) ...
- Den Dayal Upadhyaya Grameen Kaushalya Yojana ...
- Deendayal Antyodaya Yojana/ National Rural Livelihood Mission ...
- Prime Minister Rural Development Fellows Scheme ...
- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) ...
- Samagrasiksha Abhiyan
- Sansad Adarsh gram yojana
- Pradhan Mantri Awa's Yojana
- Antyodaya Yojana
- Provision for urban amenities in rural areas (Scheme for rural developments launched by Government of India, 2022)

his developments & many more schemes like rural connectivity through the Flagship Programme has been largely accepted by people and also bi-partisan political support. one has to keep in mind that India's major Agri produce come from Rural areas 45% of GDP has to move through rural belts. Hence, we can't afford to completely ignore this very essential fold of our country.

### **We need to provide the Rural People:**

Better roads	Better markets
Rail lines	Proper shades
Bus routes	Better storages
Water ways where possible.	Better local market infra

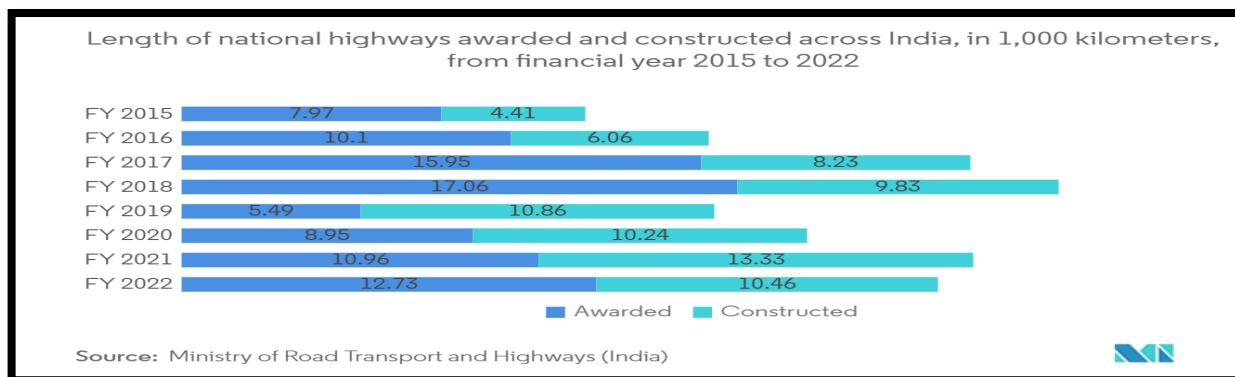
Objective 3: Government & its plan to achieve the Developed nation status & how infrastructure can fuel growth, employability & scale up capital formation.

India & China compete cut throat for major share in the pie of global trade, although China has gained some ground in fag end of the last millennia & early onset of the new millennium due to policy paralysis on the foreign trade & economic front & complete inaction by the central government, it was also termed as One among the fragile five nations grappling with economic

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crisis by world bank & IMF, the new incumbent government clearly aligned with the global sustainable goals and started to plan to achieve a 5 trillion dollar economy by 2024, innately which also had a huge requirement of infra sector push by the government to ensure it forms the carrier to relish its dream of 5 trillion economy by 2024. In its pursuit the government stated to mobilise FDI & Private investments to highest ever level, capex in every sector was increased enormously. PM Has Off late introduced PM-GATISHAKTI which integrates various ministries which reduces inter ministerial red tapism & also the PMO connected to it ensures delays are checked, prompt action & solutions are evolved. Also, will help in project cost escalations & wastages, Green Roads are built, corridors with all travel & passenger amenities, Electric vehicles are used & promoted by government electric Two-wheeler, Three wheelers, cars, buses, electrical trains, metros.

International solar alliance has been knitted in the pioneering leadership of Prime Minister Narendra Modi & French president Emmanuel Macron has gained lot of traction among world leaders as many prominent energy consuming countries have realised the most potent, clean, & constant source of energy is the solar energy which depends on sun for production & with sustainable technology, similarly the world order also relies heavily on wind energy & nuclear energy. The recent war Between Ukraine ( Backed By NATO) & Russia led to a situation of supply chain disruption, many problems did emerge as a consequence of the heavy mass destruction in both countries majorly Ukraine, which is the food bowl of Europe & also the gas supply lines, petrochemicals from Russia to European continent passed through Ukraine. This one-year-old conflict has divided the world leading to various bottlenecks emerging out of sanctions imposed by west on Russia, in such a situation the socio-economic activity of the world is severely impaired & there is acute crisis & shortage of resources related to basic living & infrastructure.



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Hence every responsible government should try & restrain from the escalatory ladder as in today's world the impact of a conflict is cascading & hurts economies deeply, reconstruction of the same would lead us to the point where we had started, defence being integral part of a nation's infrastructure countries should retrieve themselves from being aggressive and practice policy of non-proliferation & deterrence. largely leading to a proper world order & peace leaving space for development.

In its sincere effort to plan for a sustainable future through sustainable infra the government has also outlined its clear vision document in which it envisages Pancha Pran-Five vows given by our honorable PM where he invokes all of us to stand united & get rid of any colonial Imprints and work towards a Self-Reliant BHARATH.

GOI-Government of India's Tangible push to speed up infra projects: After a lull of approximately 20 years the government has earmarked huge allocations in infra sector realising that infrastructure acts as a "Back Bone" to accomplish the vision & mission of becoming an economic superpower. One lakh crores have been set aside for 5 years as a massive investment plan in areas below.

Ports, airports, railways, bridges, metros ,canal, inland waterways, cold storages, Speed train corridors, tunnels, high altitude bridges, under water explorations, hospitals, PHC'S, schools ,colleges, research centres, dedicated corridors, fast lane highways, modern toll plazas, modern rail infrastructure, high speed trains.

Top Ten ongoing projects in India which demonstrate the tangible efforts of the government at dispensations will to improve & scale up Infra thereby increase employability & augment & scale up Infra in the country for Ease of LIVING & SUSTAINABLE DEVELOPMENT.

These are not just policy initiatives but also have vision & strategic intent. As we live in a neighbourhood which both on eastern & western frontiers have fought 6 wars of different scale & magnitude, we have to have preparedness to face any eventuality for which we need defence infra, Roads, Vehicles, Arms & ammunitions .these needs are constantly planned & procured by the nation to protect the sovereignty of our country.

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- Delhi-Mumbai Trade Corridor Cost US\$ 90bn
- Gujarat International Finance Tec-City Cost US \$20bn
- Diamond Quadrilateral project Cost US\$13 bn.
- **Jewar International Airport Cost US\$4.19bn**
- **Bharath Mala Road connectivity Project**
- **Chenab bridge: World's highest rail bridge Cost US\$ 184 Million**

Such huge outlays fuel the local demand & economy also from the point of Foreign Trade we can look up to mutual exchanges. Domestic industries become stronger & more resilient. Stronger infra is an idea to construct & develop capacities for global pitch & trade. World class infra attracts more services, space Connectivity, manufacturing facilities, exploration services, space science etc. leading to FPI & FDI Inflows overall Micro & Macro parameters start to improve in an exponential way. For instance, India has shown consistent growth consistently other the Covid-19 Year when there was a global recession,

The following areas are some areas which give good revenue to the government.

### POWER, BRIDGES, DAMS.

Through power generation the government makes in lot of money, tolls also fetch good currency if maintained properly. They do generate lot of employability as well.

Dams do a multi-purpose job of water conservation & power generation along with tourist attraction.

Two projects of road construction BHARTHMALA & SAGARMALA

### INLAND WATERWAYS, AIRPORTS UNDER UDAAN SCHEME

**MUMBAI SEALINK**: Oil & Natural Gas: in today's business world these two resources form extremely important raw materials in shaping the final products. Both have domestic as well as commercial use. In this area India is trying hard to alternate this resource by exploring various other alternate energy forms like wind, tidal etc energy forms.



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The project cost runs in Lakhs of cores of rupees stimulating local demand generating employment & business. Har ghar Jal mission targets to provide potable drinking water to every household in the country by 2025. More than 8 crore households are in the scheme of things. Swachh Bharath Abhiyan: under this scheme the GOI has resolved & urged its citizen to maintain things in their accessibility & nearby vicinity clean.

Metro rail transport: yet another cheap & cost-effective method which is not so developed around the globe but for a highly populous urban concentric population like India it can be a game changer.

China has a metro line of 13000 kms as compare to that of USA & INDIA'S 1250 KM & 850 KM. all countries put together hold worlds close to 40 percent population, if we are able to provide world class transport at cheaper rates to rural pockets, we can bring about a huge change in the way we are about to travel in an eco-friendly way.

### **Objective 4: Technological advancements, infra-financing & Sustainability.**

As discussed, sustainable solutions are the order of the day-development & sustainability are to be managed hand in hand. The world in its history of existence has experienced a dynamic technological change in a short span of 50 years; make life more disruptive & equally challenging. Infrastructure has to be scaled up by embracing the best technology with low cost & sustainability.

Technology like block chain, IOT, IDC, AI, BMI, DRONES, HS-INTERNET, POWER BI, AZURE, ANALYTICS, CADD, EV, CHARGING STATIONS, CYBER & DATA SECURITY RISKS, LOW CARBON, EMISSION, TECHNOLOGY ETC.

Eventually all of these leading to clean energy, clean high tech infra, high-speed connectivity, effective manufacturing & processing, proper supply chain management, customer delivery & ease of operations. Scientist and engineers are constantly working towards a less carbon green & livable planet for all, even citizens

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& organizations have put their money on this as every one of us realizes the consequences would be more hazardous & damaging. We need to switch to tech advanced products like:

1. Electric cars
2. Natural fabric
3. Natural beauty products
4. Disposable degradable products
5. Living with nature concept & Sea weeds products
6. Animals as part of life
7. Yoga

Heavy investments are being vetted out in the area of SCM, BLOCK CHAIN, AZURE & AI also clean energy sources for Power generation etc.,

**CONCLUSION:** Infrastructure is an important ingredient which adds to the of a nations socio-Economic growth it is a visible indicator to the overall tangible strength a country holds in the form of physical assets. A nation's citizenry strives to contribute to its prosperity & global standing. In turn they expect high class infrastructure of different types. From a business stand point infrastructure gives the critical edge to every company to look for key opportunity and try to compete in this global village where international trade is no more restricted to one country. Multilateral association paves way for FTA-FREE TRADE AGREEMENTS entitling for supply & procurement of goods among member countries.

In the end the world is home of 7.5 billion peopling every one of which lives with an aspiration to have opportunities a life of quality & health, prosperity. The underscore being “ sustainable development” Highly populated nations like India, Russia, China, USA have to shoulder the responsibility of equitable & inclusive ,eco-friendly growth of all the world anchoring the spirit of sustainable development & care for nature concept.

Hence India in its Presidency of G-20 this year has given a call for the theme of “ VASUDAIVA KUTMBAKAM” means one earth-one family. Also, India has bought & pioneered the use of Millets in the food consumption at the centre stage in the world forums & United Nations. India is leading the solar alliance at the UN.

### References:

(n.d.). Retrieved from wikipedia:

[https://en.wikipedia.org/wiki/Civil\\_aviation\\_in\\_India#:~:text=Air%20India%20is%20India%27s%20national%20flag%20carrier%20after,carriers%20in%20order%20of%20their%20market%20share.%20](https://en.wikipedia.org/wiki/Civil_aviation_in_India#:~:text=Air%20India%20is%20India%27s%20national%20flag%20carrier%20after,carriers%20in%20order%20of%20their%20market%20share.%20)

(n.d.). Retrieved from wikipedia: [https://en.wikipedia.org/wiki/Roads\\_in\\_India](https://en.wikipedia.org/wiki/Roads_in_India)

(n.d.). Retrieved from SDG: <https://sdgs.un.org/goals>

*Global e-commerce explained stats & trends to watch.* (2022, nov 24). Retrieved from shopify:

<https://www.shopify.com/enterprise/global-ecommerce-statistics#:~:text=Global%20Ecommerce%20Explained%3A%20Stats%20and%20Trends,It%E2%80%99s%20not%20one%20strategy%20among%20many.&text=Global%20Ecommerce%20Explained%3A%20Stats,one%20strategy%20among%20man>

*INDIA INFRASTRUCTURE SECTOR GROWTH, TRENDS, COVID-19 IMPACT & FORECASTS(2023-2028).* (2022). Retrieved from MORDORINTELLIGENCE.COM:

<https://www.mordorintelligence.com/industry-reports/infrastructure-sector-in-india>

*NZSFI.* (2009 (8)).

*Scheme for rural developments launched by Government of India.* (2022, APRIL 27). Retrieved from

[www.mapsofindia.com: https://www.mapsofindia.com/my-india/government/schemes-for-rural-development-launched-by-government-of-india](https://www.mapsofindia.com/my-india/government/schemes-for-rural-development-launched-by-government-of-india)

*Top ongoing mega projects in India.* (2023, jan 6). Retrieved from

<https://constructionreviewonline.com/biggest-projects/top-ongoing-mega-projects-in-india-2/>

**A study on the Application of Internal Audit to Strengthen the Corporate  
Governance**

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**ABSTRACT**

Corporate governance has evolved into an essential component of modern businesses particularly in the healthcare industry, where stakeholders are worried about patient safety and regulatory compliance. Internal audit, as a tool for improving corporate governance, can assist healthcare businesses in identifying risks, strengthening control systems, and increasing openness and responsibility. The purpose of this article is to investigate the use of internal audit to promote corporate governance in the healthcare business, highlighting its benefits, challenges, and critical success factors. The primary goal of this article, under this idea, is to investigate the theoretical contribution of internal auditing to corporate governance. Furthermore, the paper focuses on the interaction of internal audit factors such as risk assessment and internal control, the unethical behavior in finance, external auditor reports on the internal control that plays a significant role in enhancing the corporate governance. The study's uniqueness is the establishment of an integrated conceptual framework for internal audit and company corporate governance through an extensive literature review. The article concludes with recommendations for healthcare organizations interested in utilizing internal auditing as a means of enhancing corporate governance. According to the findings of this literature review, internal auditing is critical to effective corporate governance.

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**KEYWORDS:** Internal audit, corporate governance, risk assessment, external auditors, Healthcare industry

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### **INTRODUCTION**

The internal audit division is responsible for overseeing the company's operations designed to provide added value and improve company operations by evaluating the effectiveness of the risk management process, control and corporate governance. In recent years, fraud instances involving organizations from across the world have come to light. Traditional auditors and the board of directors have failed to fulfill their oversight responsibilities. People's attention began to move to internal governance. Since then, the audit report has taken center stage and has attracted increasing attention. According to the theory of the Institute of Internal Auditors, the internal audit work is organized to promote the improvement of its own value, so the function of this work is to confirm and consult.

Internal audit uses a rational and scientific methodology to evaluate the performance of risk management initiatives in order to ensure that businesses reach their goals more quickly and effectively. The company's objectives are framework for defining the internal audit objectives and this direct link is basis for understanding the relationship in which the internal audit activity is focused on helping the company to achieve its goals. A company's primary goal is to maximize earnings and maximize value. There will constantly be problems in the operating process, and the presence of these challenges will substantially impede the company's healthy development.

Economic and social goals, Transparency in corporate governance enables strong and balanced economic development. This also ensures that the interests of all shareholders (majority and minority) are protected. It ensures that all shareholders exercise their rights fully and that the organization acknowledges their rights fully. At this stage, an impartial function is required to supervise operations, and internal audit can fill that position. Timely assessment, using various review techniques, may reflect diverse risks and current difficulties in internal operations, communicate to management in a timely way, issue new plans, and implement amended plans to guarantee the ultimate objective is realized. As a result, while utilizing internal audit to assess the enterprise system's implementation success, the emphasis is mostly on whether the corporate governance structure has established appropriate checks and balances. Just like the good governance of the state, corporate governance sets out mechanisms to ensure the

transparency and accountability of firms. As James Wolfensohn, ex- President of the World Bank once said: “the governance of the corporation is as important in the world economy as the government of countries”. To attain governance excellence, the corporation must prioritize all aspects of corporate governance, particularly the internal audit function. It evaluates the organization's commitment to ethics as well as its goals, programmes, and actions. It is also a vital source of information for other pillars such as external audit, the Audit Committee, the Board of Directors, and senior management. The function of internal audit is to regulate and maintain the quality of corporate governance.

### **REVIEW OF LITERATURE**

**(Gassama & Sudaryati, 2022):** The researcher's primary goal is to demonstrate the necessity of internal audit since internal audit can conduct objective assessments due to its independence, providing management and the board with an informed and unbiased critique of governance systems, risk management, and internal control. Based on its findings, internal audit offers recommendations for process changes and evaluates their implementation. The goal of the internal audit profession was to find flaws that may later be used to reduce fraud and preserve assets.

- **(Kashima 2019):** The author describes the roles and responsibilities of internal towards the prime user of the financial statements, an internal audit is an independent evaluation function created within the company to examine and to evaluate its activities. It's goal is to assist the stakeholders in carrying out their responsibility effectively to enhance the organization's internal control.
- **(Budi Septiawan 2017):** The researcher implies the role of internal audit in the organization. Audit provides assurance by monitoring and reporting on the effectiveness of governance, risk management, and control systems meant to assist the company in meeting strategic, operational, financial, and compliance goals. The role of internal auditing in State Owned Enterprises (SOE) is indispensable in helping management carry out its responsibilities effectively and efficiently. With the role of the internal auditing, management is expected to be able to devote attention to administrative asks, so that the task of daily supervision over state-owned companies can be implemented more intensively and effectively without diminishing their responsibilities.

- **(al, 2018):** Corporate Governance Statement includes a short description of how the board operates including the number of meetings of the board and individual attendance by board member, the number of meetings of board committees and individual attendance by committee members, a short description of the composition, terms of reference and main issues discussed by each board committee and a description of how the performance evaluation of the board and its committees has been conducted. Good governance can protect investors and stakeholders from all walks of life and ensure that the modern market economy system can operate healthily and steadily
- **(OECD, 2015):** The researcher in his study examines the relationship between the management, the board, shareholders and stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, & the means of attaining those objectives and monitoring performance are determined.
- **(Zaharia, 2014):** The researcher did a study on internal audit and corporate governance. He emphasizes that the internal audit should become a pillar supporting corporate governance, and generally, any management act, as well as a paramount instrument used to identify risks that entities might take when performing their activities in an environmental turmoil.

### **A CONCEPTUAL FRAMEWORK OF INTERNAL AUDIT**

The concept of auditing is an old one, with the goal of the verification and the protection of financial statements. That is the reason why the audit mission has long been associated with the Court of Auditors. At this point, it is pertinent to elaborate more on internal auditing and its relevance in enhancing good corporate governance practice in an organization. Historically, internal auditing has been viewed as a monitoring function, the organizational ‘policeman and watchdog’ (Morgan, 1979), tolerated as a necessary component of organizational control but deemed dutiful to the achievement of major corporate objectives. The primary purpose of internal auditing is to improve organizational efficiency and effectiveness through constructive scrutiny of internal processes, policies and procedures. Also, internal auditing ensures that weaknesses are detected in management operations and provides a basis for correcting deficiencies that have escaped the first line of defense before these deficiencies becomes

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uncontrollable or are exposed to the external auditors. (Eden D, 1996)

The IIA international association which federates the national internal audit institutes defines internal auditors as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance process.” The concept of governance is present in this definition of internal audit. Thus, the function of the internal audit appears as a major actor of corporate governance. Controls mechanisms are those processes put in place to monitor, direct, promote or restrain the various activities of an organization to ensure that the objectives are met. (Coram P, 2008). In corporations, internal auditing functions as an important link in the business and financial reporting processes, internal auditors play significant role in monitoring an organization’s risk profile and identifying areas of improvement in risk management.

### **A CONCEPTUAL FRAMEWORK OF CORPORATE GOVERNANCE**

Corporate governance involves a set of relationships and the network between a company’s management, its board of directors, share holders and stake holders. It can be defined as ‘the system by which companies are directed and controlled. (Cadbury, 1992)

The authors (Cohen A, 2010) used Public Oversight Board’s perspective defined corporate governance as ‘those oversight activities undertaken by the board of directors and audit committee to ensure the integrity of the financial reporting processes. This view focuses on the control environment and control activities.

Therefore, the corporate governance refers to the group of regulations and systems governing, on the one hand, the relationship between the shareholders and the managers; and on the other hand, between shareholders and other stakeholders, whose purpose is to protect the interests of these different parties. Most importantly, corporate governance gives the tools for setting, monitoring, and achieving business goals.

The shareholders, and notably the board of directors and management, are central to corporate governance philosophy and practice. As previously noted, recent corporate incidents have highlighted the need of directors in encouraging sound corporate governance procedures.



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These incidents have also emphasized the crucial role that internal auditing may play in assisting the board in maintaining proper internal control monitoring and the effectiveness of corporate governance. Boards, in particular, bear ultimate responsibility for the success of their organization's internal control systems.

### **STATEMENT OF THE PROBLEM**

The universal internal audit is founded on the notion of voluntariness. Internal audit settings are determined by whether the organization has the proper settings and the quantity of audit work. However, the majority of modern businesses were established due to government compulsion rather than by choice. As a company's senior management, as its operators, they are more concerned with how to enhance economic efficiency, simplify the structure of the company's departments, and are averse to hiring high-quality expert auditors. This raises questions on ethics and corporate governance of the organization which creates an environment of distrust. This study is conducted to analyze the role of internal audit in strengthening the corporate governance of an organization.

### **SCOPE OF THE STUDY**

This study provides an insight on the internal audit procedure conducted by an internal audit committee to express true and fair opinions on the financial statements. These opinions are furnished to the BOD and the other members of the organization. This gives the BOD and the management to take appropriate steps to take appropriate for internal control, regulate policy and procedures of the organization. The study explains the internal audit in promoting the corporate governance structure of healthcare industry

### **OBJECTIVES OF THE STUDY:**

- To study the internal control and the risk assessment procedure through the purview of internal audit.
- To examine the importance of independent audit and objectivity of the internal auditor.
- To study the importance of internal audit to enhance the corporate governance in the health care industry.

### OPERATIONAL DEFINITION

- **Internal Audit:** Internal auditing is a broad approach that assists organizations in achieving their goals. It is focused on assessing and enhancing the performance of an organization's risk management, control, and governance systems.
- **Corporate Governance:** Corporate governance is a continuous cycle through which a corporation applies best management practices, ensures the law is followed correctly, and adheres to ethical standards in order to achieve effective management, satisfy stakeholder duties, and comply with corporate social responsibilities.
- **Risk Assessment:** A risk assessment is a methodical procedure for finding, assessing, and controlling hazards and risks. A competent individual does it to assess whether measures are or should be in place to eliminate or control risk in the workplace in every probable circumstance.
- **Internal control:** Internal control is a procedure carried out by a company's board of directors, management, and other people to provide reasonable assurance that information is trustworthy, accurate, and timely. In terms of adhering to applicable rules, regulations, contracts, policies, and processes.
- **Auditor's Independence:** A certified public accountant (CPA) or chartered accountant (CA) who is not linked with a corporation reviews its financial records and business activities as an independent auditor. An independent auditor is commonly employed to avoid conflicts of interest and to assure the integrity of auditing.

INTERNAL CONTROL & RISK ASSESSMENT THROUGH THE EYE OF AN INTERNAL AUDIT COMMITTEE:

### INTERNAL CONTROL:

One of the primary goals of internal audit is to evaluate the efficacy of the organization's internal controls and risk management processes. This entails assessing the processes and procedures in place to ensure that patient care is given in a safe and efficient manner, as

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well as that financial reporting is accurate and dependable. Internal audit, for example, can examine the organization's patient safety policies and procedures, such as infection control measures, prescription management systems, and patient identification procedures. Internal audit can help the business improve patient safety and reduce the likelihood of adverse events by identifying areas where these processes may be weak or ineffective.

Internal control requires a methodical strategy that includes the following steps:

**Identifying and assessing risks:** This involves recognizing the potential risks that could hinder the organization from reaching its objectives, such as the risk of medical errors, data breaches, or regulatory violations.

**Control monitoring and improvement:** Once controls are in place, the organization must regularly monitor their performance and enhance them to ensure that they stay effective overtime. Auditors now serve an essential role, serving a societal function by providing a judgment on the accuracy of financial statements. The role of the auditor is to offer an opinion on the financial statements. It has progressed from a background examination of assets and liabilities to a risk- based verification. The term "reasonable assurance" refers to financial statements prepared in accordance with the statutory framework.

The auditor's judgment strengthens the financial statements' credibility by giving a high level of certification. The auditor's professional judgment and the inherent constraints of the accounting system and internal control cannot achieve the absolute level. Management, for example, may disregard internal control. In making those risk assessments, the audit or consider internal control necessary for the production and fair presentation of the particular company's financial statements, to design applicable audit procedures on specific circumstances, but not for the goal of giving an opinion on the efficacy of the company's internal control. The assessment of audit risk is critical to effectively preparing an audit.

The role of individuals responsible with governance includes, among other things, monitoring management. It must also assure the integrity of accounting and financial reporting systems, as well as proper controls to manage risk, including financial control and legislative compliance.

### **RISK ASSESSMENT PROCEDURE:**

Modern innovations in corporate governance have enhanced the profile of risk management within firms. While directors and senior management bear primary responsibility for risk management, internal auditors are viewed as important contributors as advisors and assurance providers on risk management processes and systems. Internal auditing, in particular, has emerged as a significant driver of the notion of enterprise risk management (ERM), as defined by– “Process, affected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives”

As outlined in the Institute of Internal Auditors International Professionals Practices Framework (IPPF), internal audit professionals are expected to play a central role in the enterprise risk management process. The IPPF Performance Standard 2120, states, “The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes.”

Recent corporate governance developments have raised the profile of risk management within organizations. While the prime responsibility for risk management lies with the directors and senior management, internal auditors are also seen as key contributors as consultants and assurance providers on risk management processes and systems. In particular, the internal auditing profession has become a key driver of the concept of enterprise risk management.

This will help ensure key business risks are being managed appropriately and that the system of internal control is operating effectively. As internal audit becomes more involved in the risk management processes, the discipline of performing risk assessments becomes a more emphasized job function. Risk assessment is a key analytical tool to identify and assess the extent of a likely hazard and to estimate the probability and consequences of negative outcomes for humans, property or the environment.

Risk assessments are typically conducted on regulations, policies, processes, strategies and other attributes of organization. Furthermore, internal audit provides an independent assessment of the quality, dependability, and internal auditors play limited responsibilities in risk management, the study which was sought to investigate the contribution of internal auditing to

risk management in financial institutions revealed that internal auditors are preoccupied with compliance related issues, but they were less involved in addressing risk exposures through enhancements in the organizational culture

The internal audit function conducts evaluations and tests of key control processes analyses control design and execution, and makes recommendations for improvement to assess internal control. Internal audit also evaluates the efficacy of financial reporting internal controls to guarantee compliance with regulatory requirements and auditing standards. Internal audit examines the internal control and risk assessment processes to see whether they are operating effectively and efficiently. Where appropriate, internal audit makes recommendations for enhancements to the organization's internal control and risk management systems.

### **THE INDEPENDENCE AND OBJECTIVITY OF THE INTERNAL AUDIT**

Auditor independence and objectivity are the profession's pillars. Auditor assurance services derive their worth and credibility from the essential notions of mental independence and physical independence. Previous research on auditor independence and objectivity has primarily been conducted in the context of external audit. Nonetheless, in recent years, there has been a surge of interest in concerns concerning the independence and objectivity of internal audit.

In this regard, internal auditors are in a unique situation as providers of both assurance services within the organization and consultancy services to managers. Not surprisingly, this dual role has generated significant debate as it has the potential to place the internal auditor in a situation of conflict. Furthermore, as employees of the organization, the ability of internal auditors to exercise true objectivity has also been questioned.

In recognition of the potential for conflict, the Institute of Internal Auditors (IIA) has issued a number of professional standards and guidelines with respect to independence and objectivity. In fact, the (IIA, 2001): as a guide for managing threats to objectivity. The framework identifies seven key threats: self-review, social pressure, economic interest, and personal relationship, and familiarity, cultural and cognitive biases. It also identifies a variety of safeguards against these threats. “Independence The freedom from conditions that threaten objectivity or the appearance of objectivity such threats to objectivity must be managed at the individual auditor, engagement, functional and organizational levels.”

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Objectivity an unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to that of others.

Furthermore, internal auditors are expected to make a balanced assessment of all relevant circumstances, and their judgments should not be excessively swayed by their own or others' interests.

- (i) Internal auditors are required to refrain from engaging in any activity or relationship that may impair or be presumed to impair their unbiased assessment
- (ii) Refrain from accepting anything that may impair or be presumed to impair their professional judgement and
- (iii) Disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under view.

The framework also includes instances of mitigating factors that might be used to protect objectivity against threats. Examples include organizational position and policy statements that elevate the stature of internal auditors inside the business, a strong and supportive governance environment, proper incentive schemes that promote objectivity, teamwork, and effective staff supervision.

### **THE IMPORTANCE OF INTERNAL AUDIT TO ENHANCE THE CORPORATE GOVERNANCE IN THE HEALTHCARE INDUSTRY**

The healthcare industry is a complex one that is expanding quickly. To maintain efficient and ethical operations, it needs strong corporate governance. The internal audit role is one of the most important aspects of efficient corporate governance in the healthcare industry. The focus is on the value of internal audit in enhancing corporate governance in the health care industry. The provision of independent assurance and consulting services by internal audit, a key element of corporate governance in the health care industry, aids health care organizations in achieving their goals, for healthcare firms to have efficient risk management, internal controls, and compliance procedures in place, internal audit is a crucial component.

The internal audit is important in the healthcare industry because:

- **Independent Assurance**
- **Risk management**
- **Internal control Compliance**
- **Cost Savings**

Patient involvement in service delivery;

- staffing and staff management;
- continuous professional development;
- clinical effectiveness;
- education and training;
- using available information;
- clear lines of accountability and responsibility

A corporate governance practice for listed companies – sometimes mandated is to use audit committees to provide strength endeavor to the financial and ethical integrity of publicly held companies. The audit committee, made up of independent directors, can greatly strengthen the independence, integrity, and effectiveness of audit activities by providing independent oversight of the internal and external audit work plans and results, assessing audit resource and qualification needs, and mediating the auditors' relationship with the organization. Companies that adhere to good corporate governance practices are more likely to attract investment, which is essential for the growth and development of the healthcare industry. One example of an Indian hospital that has attracted significant investment is Narayana Health. The company has established a robust corporate governance framework that includes a board of directors with diverse expertise and experience. As per one of the 2021-2022 report on the role of internal audit on corporate governance of Narayana Hrudhyala suggests that The Audit, Risk and Compliance Committee provides direction to the audit function and monitors the quality of internal and statutory audit. The Committee functions as per the provisions of SEBI

Regulations, 2015 and the provisions of the Companies Act 2013.

### **CONCLUSION**

In conclusion, internal audit is an essential component of corporate governance in the healthcare sector, and its role in risk assessment, internal control, and auditor independence and objectivity is critical.

Firstly, risk assessment is a vital aspect of corporate governance, Internal audit plays a crucial role in identifying and assessing risks to the organization, including those related to clinical care, patient safety, compliance, financial reporting, and information security. By conducting risk assessments, internal audit can help healthcare organizations develop effective risk management strategies that can minimize the likelihood and impact of adverse events.

Secondly, internal control is another crucial element of corporate governance, and internal audit is responsible for evaluating the effectiveness of internal controls in place. Internal control includes policies, procedures, and processes that are designed to manage risks and ensure that the organization's objectives are achieved. By assessing the adequacy and effectiveness of internal control, internal audit can help healthcare organizations identify weaknesses and vulnerabilities and make recommendations for improvement. This can help ensure that the organization's assets are safeguarded, financial reporting is accurate and reliable, and compliance with legal and regulatory requirements is achieved.

Finally, auditor independence and objectivity are critical to the effectiveness of internal audit. Internal auditors must maintain their independence and objectivity to provide impartial and unbiased assessments of the organization's risks, controls, and compliance. This means that internal auditors must be free from any conflicts of interest, undue influence, or pressure from management. By maintaining independence and objectivity, internal auditors can provide credible and reliable information to the board and senior management, which can help them make informed decisions about the organization's risks and opportunities.

### **RECOMMENDATION**

Though the objective of this research was not to provide a blanket statement of facts, the researcher believes it is important to give some recommendations that stakeholders may find useful.



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- As the IAF has gained a more central role, internal auditors must always perform their duties with professionalism, objectivity, and fairness.
- Compliance tests should be carried out annually to ensure corporate governance principles are not circumvented.
- The concept of corporate governance is very broad. The researcher focused mainly on IAF and its impact on performance in healthcare sector, hence, it is recommended that further research on IAF or other aspects of the corporate governance mosaic (audit committee, external audit, public oversight, etc.)
- Since, the research is exploratory and descriptive in nature that is limited to literature reviews it is recommended that other researchers incorporate other sources of data for an all-inclusive study.

### References:

- <https://www.narayanahealth.org/sites/default/files/download/agm-2022/NHL-Annual-Report-2021-22.pdf>.
- Agnihotri, A. (2021). Study of corporate governance in government hospitals: A case study of the emerging market Article. al. (2018).
- Al-Baidhani, A. (. (2016). The nature of a dynamic relationship between audit committee and auditors both internal and external. *Business and Economics Journal*, 7(4), 1-5.
- Al-Thuneibat, R. a. (2018). *Investigation On Key Factors Promoting Internal Control Implementation*.
- Andreas G. Koutoupis1, a. P. (2021). Risk identification, assessment and management in the Greek public hospitals: The contribution of the Board of Directors and Internal Audit.
- Bubilek, O. (n.d.). Importance of Internal Audit and Internal control in an organization. by Al-Debei, A. a.-L. (2018). *European Journal of Information Systems*.
- Cadbury. (1992). The Financial Aspects of corporate Governance: A Report of the committee of governance.
- Eden D, M. L. (1996). Impact of Internal Auditing on Branch bank.

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**ABSTRACT:**

A cashless economy is one in which the majority of activities are completed without the use of actual cash or other forms of hard currency. It is an economy where financial transactions are carried out using tools like credit cards, debit cards, and online money transfers and e-wallets. The government's emphasis on cashless transactions and the new demonetization policy sends a strong signal that the nation wants to experience strong economic development. The use of electronic wallets, checks, and online banking has increased as a result of the demonetization strategy. It has decreased the danger of theft and financial loss on the one hand while also making risk-free transactions easier. The absence of cash implies that digital mode is increasingly used and less use of cash in transactions and more use of digital method.

Cashless societies have significantly less black money in circulation and are thus free of the corruption scourge. Going cashless in a nation like India is challenging because so many people rely on using cash. The best method to transition to a cashless economy, which opens the door for economic expansion, is through the digitization of transactions. The goal is to understand the contribution of demonetization to economic expansion through digitalization and to research the variables that affect use of digital means. As a significant portion of the population in rural areas has a poor literacy rate, banks and other financial institutions should run financial campaigns to ensure the success of a cashless economy there. It provides information for different financial organizations to focus more on rural areas in order to support cashless transactions there, which will support economic growth.

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**Keywords:** Cashless transactions, Digitalization, Electronic, Government, Rural Areas.

### INTRODUCTION:

#### Cashless Economy

- A cashless economy is one where interactions are conducted primarily online and with less cash.
- The World Bank's World Development Report-2016 envisages that in many instances, digital technologies have boosted growth, expanded opportunities and improved service delivery.
- One of the reasons developed economies have larger digital economies is because there is less corruption in these nations than in developing economies.
- Sweden ranks in third on the Corruption Perception Index with an 89% cash payment rate. According to estimates, 22% of payments in India are non-cash, and the country is ranked 76th in the Corruption Perception Index. This conclusively demonstrates that there is a strong inverse relationship between misconduct and cashless transactions.
- The two highest denomination notes in circulation—the INR 500 and INR 1000—were removed by the government on November 8. Combating dark money and counterfeit currency were the main goals. As a result of the move, card-based digital payments were not restricted whereas all high denomination cash transactions suffered because high denomination currencies were not available.
- A cashless society is an economic setting in which financial operations are carried out through the exchange of digital information, which is essentially an electronic version of money, between the parties involved in the transaction.

### REVIEW OF LITERATURE:

A review of the literature covers the areas where study has already been done and sheds light on those where it has not. An effort has been made to work in the area of cashless transactions, which refers to one in which all transactions are completed through the use of cards or electronic devices. Numerous studies have been performed to assess the advantages and disadvantages of credit and debit cards. The review of the literature discusses e-cards and general studies on the development of the economy and a cashless society. The following is a list of significant study reviews:

### **REVIEW OF LITERATURE:**

**Al-Laham (2009)** in his research “**Development of Electronic Money and its Impact in the Central Bank Role and Monetary Policy**” asserts that there has been a lot of interest in the creation of electronic money systems recently. Cash may eventually be replaced by electronic money as the preferred method for small-value payments, which would benefit both customers and businesses by simplifying and lowering the cost of such transactions.

**Mandeep Kaur and Kamaldeep Kaur (2008), Development of Plastic Cards Market**, Banks in India actively introduced plastic money in the shape of cards in the 1990s, according to a past, present, and future scenario of Indian banks. But when it was first introduced, it wasn't very well liked by Indian consumers. Consumer preferences have changed in line with changes in consumer demographics such as income, marital status, education level, etc. as well as changes in technology and consumer consciousness.

**Das and Agarwal, (2010)** conducted research on India's cashless payment method. They claimed that the government would incur high costs if the cash settlement were made. The country needs to move toward a cashless payment system that lowers costs associated with managing currencies, eliminates tax fraud, and reduces monitor transactions. Additionally, it expands financial inclusion, promotes it, and integrates the underground economy into the mainstream.

**Ovat (2012)** examines the Central Bank of Nigeria's cashless strategy. The policy goals, along with the advantages and difficulties they bring, are examined in the study. He suggested that policy should periodically reviewed to iron out grey areas; embarking on intensive awareness campaign and sensitization of the citizenry by the CBN; putting adequate security mechanisms in place to forestall fraudulent practices, making the public power supply work efficiently; and exempting cash lodgments and public holidays from cash management charges.

**Bansi Patel and Urvi Amin (2012) in their research paper “Plastic money: Road way towards cashless society”** "discussed how plastic money is now a necessary component of all transactions, making life easier and fostering better development. Additionally, the use of plastic money makes it possible to control money laundering and make effective use of the financial system, both of which are beneficial for tax legislation.

**Preeti Garg (2016)** in her research “**Study on introduction of cashless economy in India 2016: Benefits & Challenges**” examines the adoption of a cashless economy by the government is beneficial in the fight against corruption, transparency, and money laundering, but there is a problem with cybercrime in India, so it's crucial to improve internet security to protect against online fraud. According to a study, the government must improve the efficiency and openness of the e-payment system, and periodic financial literacy campaigns should be held to raise awareness of the cashless society.

**Vijaya Krushna Varma (2016)**, The cashless economy should be achieved in the phased manner and step by step process instead of forcing it on people overnight without expanding/providing banking infrastructure to every nook and corner of the country, internet connectivity with high speed at cheap rate and unbroken power supply. The researcher recommendations for a cashless economy call for its implementation from the top to the centre, leaving the bottom to the cash economy without putting the general populace through hardship.

**Bharat Khurana's (2017)**, "**Dream of Cashless India: Benefits & Challenges**," asserts that going cashless is a difficult task for a nation like India. In order to achieve the goal of digitalizing India, benefits & challenges must be explained to the general public. The article covers the government's initiatives and different projects for converting to digital transactions.

### **Statement of the Problem:**

The implementation of cashless transactions as part of the demonetization process has had a major impact on the nation. The majority of people in India are still dependent on the cash economy, but now everyone must transition to cashless transactions.

Even the government has imposed restrictions on currency transactions and encouraged the adoption and use of cashless transactions.

The government simply desires a nation where everyone carries a smart phone, a credit card, and regularly purchases milk with an e-wallet. Thus, an effort is made to research the digital economy in India and discover its advantages and difficulties.

### OBJECTIVES OF THE STUDY:

- a) To examine and understand the advantages of using the e-banking system.
- b) To analyse different e-payment awareness campaigns and other initiatives carried out by government and other private bank agencies.
- c) To understand the challenges those are involved in using cashless transactions.

### SOURCES OF DATA:

The source of data is adopted for the study is Secondary data has been collected from various research papers, government and unofficial websites, books, periodicals, and business journals.

### SCOPE OF THE STUDY:

The purpose of the suggested research is to examine the challenges to using cashless transactions as well as their advantages. The purpose of the study is to perform an overview study on cashless transactions, as indicated by the study's title. This study aids in understanding the issues with using digital tools. The research describes the advantages of using non-cash payments. The idea is more general in scope and is applicable to all contexts in which non-cash payments, or financial activities, take place.

### MODES OF CASHLESS TRANSACTIONS:

- 1) **Credit card and Debit Cards:** An additional contactless payment option is using a credit card or debit card. In India, credit cards and debit cards were not widely used. However, due to demonetization, credit card and debit card utilization is now rising. The absence of a swipe card capability at the merchant end is one of its drawbacks.
- 2) **Cheque:** One of the earliest forms of digital payment is the Cheque. Everyone is familiar with this technique. With this approach, you give the other person a check for the amount that is required. The check is transferred into the appropriate bank. A clearing house is used by the bank to handle money processing. There is documentation of every cheque transaction that serves as evidence of payment. We can use other forms of electronic payment to prevent such problems. However, there are times when cheque payments are returned because of a mismatched signature or inadequate funds.

- 3) **Demand Draft:** Another simple form of cashless exchange is a demand draft. Receiving money from anyone is the safest method of operation. Given that the banker approves the demand draft (DD), it never goes bad. Demand drafts and checks have the drawback that you must visit a bank to cash them. It takes longer for a check or DD to process.
- 4) **Online transfers- NEFT or RTGS:** Online transfers using NEFT or RTGS are the simplest method for cashless transactions. You need internet banking capabilities in order to conduct online money transfers. Comparatively quicker than a check or DD is an online transfer made using NEFT or RTGS. Online transfers are possible from anywhere with an internet connection.
- 5) **Mobile Wallet:** Mobile wallets are the next paperless payment option. A debit card, credit card, or online banking passwords are not required to use a mobile wallet to make a purchase. Simply add money to your device using IMPS and use it while you're on the go. From the Google Play Store, you can obtain mobile wallet app. Mobile accounts include, but are not limited to, Paytm, PayUMoney, Mobikwik, Phone pay.
- 6) **E- Wallet:** The next cashless payment choice is an e-Wallet. E-Wallets can be used to buy anything from groceries to plane reservations. Both the customer and the merchant need smart phones with live internet connections in order to use an e-wallet. PayPal is the most well-known illustration of an e-wallet.
- 7) **UPI:** With the help of the UPI mobile system, you can do a number of banking transactions on your smartphone. Without entering bank details, UPI enables you to transfer or receive money using a virtual payment address. In order to receive payments using banks, businesses can sign up with UPI. The merchant would need a current account with a bank in order to take UPI payments, just like with a POS device. SBI Pay, Union Bank UPI App, Phonepe, etc. are a few instances of UPI apps.
- 8) **Unstructured Supplementary Service Data:** If you don't have a smart phone or internet access, you can still use the USSD cashless option. Mobile banking is a tool that uses unstructured supplementary service data. You can access this feature by dialling \*99# from any mobile device. All of these activities are possible if you have a Smartphone and an internet connection. Almost all financial institutions accept USSD transfers, including SBI, ICICI, BOB, and AXIS BANK.

- 9) **Aadhaar Enabled Payment System (AEPS):** One of the finest cashless payment options is the Aadhaar Enabled Payment System (AEPS). Similar to a micro-ATM, AEPS conducts transactions using a Smartphone and a finger-print reader. It is necessary to link your Aadhaar card to your bank account in order to use this feature. You can use AEPS to carry out operations like cash withdrawals, cash deposits, Aadhar to Aadhaar money transfers, etc.
- 10) **Gift Cards:** Gift cards are the next contactless payment option. A ready-made card known as a gift card can be obtained from a retailer or a bank. The gift card has a set quantity of money loaded on it, and you can use it to buy anything from a particular vendor.

### **Achieving a cashless rural economy**

The idea of implementing a cashless economy is being investigated by policymakers all over the world with great interest. The fastest way to a cashless economy is through the digitization of transactions.

Two thirds of the country's 870 million people live in rural areas, where implementing cashless transactions for the rest of the decade will be very challenging.

In 2020, it is predicted that nearly half of all Internet consumers will reside in rural areas. By 2020, there should be almost 315 million linked rural consumers, an increase from 120 million in 2015.

In rural India, more than 93% of individuals have never used a digital payment method. The actual issue is thus there. Despite the government's efforts, which included announcing zero balance accounts for individuals, bank branch expansion has lagged.

### **CHALLENGES:**

The economy is denominated in currency: India has a high degree of cash circulation. The quantity of money in circulation accounts in roughly 13% of India's GDP.



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Cash is the primary form of payment for transactions: Nearly 95% of trades take place in cash. Large-scale informal/unorganized sector businesses and employees favour cash-based transactions.

The primary purpose of using an ATM is to take cash, not to complete online transactions: The use of ATM cards for monetary withdrawals is close to 92%. Numerous cards holding in urban and semi-urban regions indicate poor rural penetration.

Point of sale terminals is scarce; the majority of them are still found in urban and semi-urban regions.

Rural India still has a low mobile Internet penetration rate because of the country's poor connectivity. It is difficult to encourage the use of plastic money on a larger scale in low-income and rural areas of the nation because of lower literacy levels.

### **Banking facilities in rural areas**

Banks in the private sector have been steadily expanding their presence in rural areas. Over the past five years, leading private lenders ICICI Bank, HDFC Bank, and Yes Bank have increased their presence in poor and unbanked areas.

Over a three-year period from 2013 to 2016, the RBI has requested that banks give priority to establishing branches in unbanked rural centers.

Branch on Wheels is a mobile branch based in Van that seeks to provide banking services to a group of isolated unbanked villages. Technology is an incredible enabler for financial inclusion.

Despite the fact that rural locations enjoy lower real estate rents, the costs of staffing and servicing outweigh the advantages.

However, since the RBI requires that 25% of new branches be located in rural regions, banks have aggressively expanded there.

### **Prospects and the road ahead**

The Jan Dhan Aadhaar Mobile (JAM) can promote a habit of online transactions. It is expanding to all of the nation's secluded corners. Government transactions (DBT) are frequently carried out in JAM mode. This will assist individuals in becoming aware of digital transactions.

The government's involvement in these situations will be to mandate cashless transactions for certain payments and make them mandatory for certain services that cost more than a certain amount and have already initiated.

Cashless payment can be boosted by a tax break (of say, 1% to 2%) on family salary payments to the unorganized sector (domestic servants, sweepers, etc.).

This will accomplish two things: first, it will encourage households to stop using cash; second, a sizable part of the unorganized sector will become financially integrated.

The availability, accessibility, acceptability, affordability, and awareness of cashless payment methods are the "5 A's" of supporting financial inclusion.

Government should provide for basic needs in rural regions while concentrating on infrastructure development. Special campaigns in schools, colleges, and panchayats, among other places, can help raise knowledge of cashless and banking transactions.

In order to attract more and more people to digital platforms, financial literacy is a necessity. Cash payments should be avoided in favour of digital or bank-based payments.

A very strategic step is to link all welfare operations to bank accounts. The fundamental prerequisite for a cashless economy is a robust banking system.

Targeted financial education initiatives can boost account ownership and credit management, as well as financial literacy, in rural India.

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### **Perspective**

- The banking system will receive an increasing amount of money in the shape of either current or savings accounts. The savings will push up investment and contribute to capital formation in the economy.
- The creation of new bank accounts for the purpose of depositing banned currencies demonstrates the promotion of banking knowledge among the general population and the linking of the common man—who was previously outside the banking system’s net—with the banking system.
- Due to the severe NPA issue that many bank branches were experiencing, it has strengthened the banking system. The capacity of banks to lend more will be increased, which will increase economic expenditure.
- The government may receive taxable income from the excess income accumulated by banks, which it may use to fund a variety of welfare programs for the underprivileged across the economy.
- It will contribute to the country's legislative and administrative systems being free of corruption.
- It will help to control the outflow of illicit funds to other developed nations for overseas bank accounts and will improve the flow of FDI into the economy, which depends on a corruption-free environment.
- It will encourage the society's social and cultural growth. Social and cultural institutions are destroyed by corruption and black money. Unmoral societal development will be prevented by it.
- It will assist the country in achieving a real sustainable rate of economic development rather than an unreal and impure rate of economic growth obtained with the aid of black money.
- The real growth rate for a developing nation like India is any rate of development attained through distributive justice and with less economic inequality.
- Less growth means fewer people living in poverty and less income inequality, which is more desirable and better for the Happiness Index than high growth means more people live in poverty and there is a significant income gap between the rich and the poor.
- India is a great democracy where people of all ages supported the government's demonetization push to uncover black money and counterfeit currency, despite the inconvenience.

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### **Suggestion**

- To prevent the hoarding of Black Money in the form of cash, the government should continuously implement demonetization and repeat it at appropriate intervals.
- The promotion of digital banking systems in rural regions can be greatly aided by the self-help groups (SHGs).
- Giving more and more SHGs must be given the charge of Bank Mitras (friend) who can extend their help to the bank, post offices and Bank corresponding for proliferation of digital economy.
- Youth Clubs, Mahila Mandals, and Panchayati Raj Institutions are examples of rural social structures that should be energized to promote the digital rural economy.
- At the village level, the Gram Sabhas in Panchayati Raj Institutions and Ward Sabhas in ULBs must address the problem of the digital economy.
- All line agency employees, including educators, health professionals, village development officers, anganwadi workers, etc., must inform the public about financial inclusion and the digital economy.
- Like Pulse Polio Campaign, the Digital India Campaign twice or thrice in a year in a mass scale can be conducted in the nation.
- It is a suitable method for spreading awareness of the digital India campaign in both rural and urban regions.
- Demonetization and the country's transition to a cashless economy require strong political will on the part of both the governing and opposition parties.
- The government is promoting Aadhaar Pay, which guarantees financial transactions by just using fingerprints, in an effort to encourage impoverished and illiterate people in rural areas to make digital payments.
- With the help of "Aadhaar Pay," the government encourages cashless transactions in rural regions.
- Five banks have already gone live with Aadhaar Pay: Andhra Bank, IDFC Bank, IndusInd Bank, State Bank of India, and Syndicate Bank.
- Several other banks are in the process of starting pilot programs on the app.

- **Present status of countries and use of cashless transactions**

COUNTRIES	CASHLESS TRANSACTIONS
1.Singapore	61%
2. Netherlands	60%
3.France	59%
4. Sweden	59%
5.Canada	57%
6. Belgium	56%
7.United Kingdom	52%
8. USA	45%
9. Australia	35%
10. Germany	33%
11. South Korea	29%
12. Spain	16%
13. Brazil	15%
14. Japan	14%
15. China	10%
<b>16. India</b>	<b>2%</b>

**Conclusion:**

The primary objective of the research is to identify the variables that affect cashless transactions. The outcome could assist banks and other banking organizations in developing policies and strategies to persuade farms to use cashless transactions. The research aims to further explore the ways and means by which farmers in rural India can make an effort to learn how to use digital banking apps and implement themselves in cashless transactions for their business activities. Farmers are being aggressively targeted in an effort to teach them how to use cashless trades, which in turn aids in the growth of the economy. The Department of Agriculture and district

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administration must educate local government entities like panchayats and self-help organizations on how to support farmers. In terms of the difficulties experienced by citizens as a result of demonetisation, it was a wise decision that will significantly affect India and reduce black money. It is a signal from the Centre that we must advance and increasingly use technology.

### **References:**

- Madasu, P. (2015). India's Progress towards Cashless economy- An Assessment. *Gavesana Journal of and Management*, 7(2), 34.
- Shukla R & Shukla P (2011), "E-Banking: Problems & Prospects". *International Journal of management & Business studies* Vol.1, No.1.
- "Study on introduction of cashless economy in India 2016: Benefits & Challenges"- Preeti Garg, Mani Panchal. *IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 4. Ver. II (Apr. 2017), PP 116-120* [www.iosrjournals.org](http://www.iosrjournals.org)
- [Http://www.granthaalayah.com](http://www.granthaalayah.com)© *International Journal of Research – granthaalayah, dream of cashless India: benefits & challenges- Bharat Khurana, University of Delhi, India. DOI: <https://doi.org/5281/zenodo.80336>.*
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- ISSN: 2347-1697 *International Journal of Informative & Futuristic Research (IJIFR) Volume - 4, Issue -6, February 2017 Continuous 42nd Edition, Page No: 6477-6484, PradnyaSurwade, New Delhi.*
- ISSN: 2347-1697 *International Journal of Informative & Futuristic Research (IJIFR) Volume - 4, Issue -3, November 2016 Continuous 39th Edition, Page No: 5654-5662, Dr. M. Chelladurai.*
- <http://www.newindianexpress.com/nation/2016/dec/09/dear-government-cashless>.

### Scarcity of Food in Indian Context

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#### Abstract

Global inequality in food crisis is a major issue that affects millions of people around the world.

While some countries have an abundance of food resources, others struggle to meet the basic needs of their population. The unequal distribution of food resources has resulted in widespread hunger and malnutrition, particularly in developing countries.

The root cause of global inequality in food crisis is poverty, which prevents many individuals from accessing adequate nutrition. In addition, political instability and conflicts often disrupt the production and distribution of food resources, exacerbating the problem.

International organizations can also play a key role by providing aid during times of crisis and promoting sustainable agriculture practices. Ultimately, addressing global inequality in food crisis requires collective action from individuals, governments, and international organizations alike. Addressing global inequality in food crisis requires a multi-faceted approach. Governments must invest in programs that tackle poverty and improve access to education and healthcare.

India is the home to a quarter of undernourished people throughout the world, making India a thriving country in tackling hunger and Food Crisis. For the eradication of Food Scarcity and to reduce malnutrition in India, the Government has launched many schemes, such as – Public Distribution System (PDS) for food Grains, Integrated child Development Services (ICDS) and Food for Work (FFW) being few of the schemes.

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**Key words:** Food, security, PDS, ICDS, Poverty.

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### **Introduction**

Food scarcity is a persistent problem in India, affecting a large number of people, especially those living in poverty. India is the home to a quarter of undernourished people throughout the world, making India a thriving country in tackling hunger and Food Crisis.

For the eradication of Food Scarcity and to reduce malnutrition in India, the Government has launched many schemes, such as – Public Distribution System (PDS) for food Grains, Integrated child Development Services (ICDS) and Food for Work (FFW) being few of the schemes.

Food insecurity exists when people are malnourished due to the lack of food, lack of social or economic access to adequate food, and inadequate food utilization. Nearly one in three people in the world were not able access to adequate food supplies in 2020, reason being rise in population by 320 million people in just one year.

The raise in food insecurity shown in the estimates derived from the latest state of food security and nutrition in the world (SOFI) report, confirms the tragic impact lockdown of 2020 and continuing economic crisis people faced. House-hold Food Insecurity (HFI) is one of the key determinants of Chronic under nutrition in Indian children, especially among children living in resource-poor settings.

Data survey that shows this information from Indian settings is the National Samples Survey organization (NSSO). This information was taken to assess the food crisis and show how it correlates to overall growth of Indian Economy. India has ranked 101 among 116 countries on the Global Hunger Index, 2021. According to the food and Agriculture organization, the Food Price Index has increased by 30% in the year 2021-22.

### **Statement of Problem**

Food scarcity is a significant issue in India, affecting millions of people who do not have access to adequate and nutritious food. India faces several challenges such as rapidly growing population, poor infrastructure, and inadequate distribution system that result in food scarcity. This article aims to explore the various causes of food scarcity in India.

### **Objectives**

- i. This article aims to explore the various causes of food scarcity in India, the impact it has on the population, and potential solutions to this pressing issue.



- ii. Raise awareness and promote action on food scarcity in India and encourage readers to take action to support efforts to address this issue.

### **Review of literature**

The pandemic has created more significant challenges towards achieving the goals of the government to eradicate food scarcity. Hence it is important to increase our efforts to ensure that no one goes to bed hungry and is left behind. Even though food is important for survival of every human being and foundation of our cultures and civilizations, many of us take it for granted. Therefore, it is very important to create awareness regarding consumption of nutritious food to lead healthy and active lives.

It is vital to get required amount of energy for doing our daily chores. To do activities the required energy can be derived from food. On an average intake capacity of 2250 Kcal per person per day is required. India lags far behind in terms of quality protein intake at 20% which needs to be tackled by making available protein rich food products such as meat, dairy, lentils, etc. at affordable prices.

### **Findings of the study**

The following are the few suggestions regarding this study that would help to eradicate food scarcity and in the growth of Indian economy.

#### *1.1 Agriculture sector*

Agriculture sector plays a critical role in addressing food scarcity in India. India's food production could drop 16% and the number of those at risk for hunger could increase 23% by 2030 due to climate changes, says a report by the International Food Policy Research Institute (IFPRI) on the climate change and food system. National food security plans aimed at ensuring national wide food supply. Their main focus was on cereals like wheat, rice, maize. But these did not provide full range of nutrients for the poor. The foods we produce and consume are necessary to maintain the integrity of the ecosystem and the health of people.

By increasing the productivity of food grains in India and bring effective measures that help in reducing the food scarcity throughout India. Adaption of new technologies which helps to increase the productivity, promoting sustainable agriculture practices, and supporting

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smallholder farmers, the sector can contribute to ensuring that everyone in the country has access to nutritious and affordable food. Government has introduced various initiative for farmers such as PM – Kisan scheme, Paramparagat Krishi Vikas Yojana (PKVY), Pradhan Mantri FasalBimaYojana(PMFBY), etc. Government has established Grameen banks in rural areas to provide loans at lower interest rates and even some schemes without collateral securities, the loans are provided to the farmers. Farmers should use all the schemes provided by the government to increase the productivity and help in decreasing the imports. Additional funding is required to bridge the production and nutrition gap brought by the agricultural dominance of some staple crops.

### *1.2 Industrialisation*

Due to the increased use of land for non-agricultural purpose, production of food grains is rapidly decreasing. Developing countries believe that industrialisation is the only key indicator for the economic development, this is leading for the conversion of fertile land for setting up industries. As a result, food production is gradually decreasing.

Industrialization can help to increase the availability of food by providing cold storage facilities to store perishable food items such as fruits and vegetables. Increase in the employment opportunity which in turn helps to reduce poverty.

### *1.3 Innovations towards Food Security*

Science and Technological Innovations have been major factors helping to achieve advances in agriculture. Agriculture is facing many challenges and playing a critical role in improvement process of Bio-technology for sustainable Agriculture. The ‘National Food Security Mission’ (NFSM) was launched by Government. The major objective of this scheme was to increase productivity of wheat, pulses and rice on sustainable basis so as to ensure the country’s food security. The implementation NFSM was expected to increase rice production by 10 Million tonnes, wheat by 8 Million tonnes and pulses by 20 Million tonnes by 2011-12.

Technology is going to play a major role in production of grain in the following ways:

- Better seeds.
- Cultivation techniques.
- Agricultural input management.

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### *1.4 Growth in Population*

The main reason for food scarcity is increase in population. The current population of India 1.4 billion which is equivalent to 17.7% of the total world population which leads to shortage of food the scarcity is also arising due to the increase in the rate of population which is higher than the rate of food production. According to the report published by Deccan Herald it is estimated that about 56 corer people, 40.6% of the population in India suffered from moderate or severe food insecurity in 2019-21.

According to a recent survey proportion of people facing chronic hunger has increased from 14.6% in 2018-20 to 16.3% in 2019-21. At 22.4 Corer in 2019-21, India once again has dubious distinction of being home to the largest number of hungry people in the world.

### *1.5 Climate Change*

Climate change is a major contributing factor to food scarcity, as it has significant impacts on agricultural productivity, food production and food security. The changes in climate patterns have led to severe weather events such as droughts, floods and heat waves that affect crop yields and reduce the availability of food. Baseline projections indicate that global food production will grow by about 60% over 2010 levels by 2050 in the context of climate change. The production and demand are projected to grow rapidly in developing countries due to projected growth in population and incomes.

India's food production could drop by 16% and the risk for hunger could increase 23% by 2030 due to climate change, says a report by the International Food Policy Research Institute (IFPRI) on climate change and food system. The monsoon accounts for around 70% of India's annual rainfall and irrigates. 60% of its net sown area Changing patterns and intensity of extreme weather events such as heat waves, floods and already reducing agricultural productivity in India, resulting in serious threat to food securities. To increase domestic availability amid low Kharif Crop productivity in the year 2022 the Government banned the export of broken rice.

### *1.6 Supply Chain Disruption Due to Unstable Global Order*

Food security is clearly a public domain. Food security is an essential feature of a country's independence. However, food security is also a highly emotive issue, as chronic hunger, local food shortage, and sudden increases in food prices can strongly influence public sentiment and reaction.

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At the time when the Covid-19 Pandemic had already impacted the food supply around the world in 2020, Russia-Ukraine War in 2022 has disrupted the Global Supply Chain and resulted in food scarcity and food inflation. These two incidents have disrupted the Supply chain throughout the world and in turn also impacting in the scarcity of food and food inflation in India too.

Supply Chain Management (SCM) plays vital role in managing the flow of goods and/or services in a whole distribution chain from supplier to the end user. While the country produces a lot of food, a significant portion of it is wasted due to poor storage and distribution systems.

### *1.7 Environmental Pollution*

Environmental Pollution is in turn responsible for Food Crisis. In the last few decades several measures have been adopted for increasing the productivity in the agricultural domain which has opposing effect on natural environment. Fertility of pure land minerals have been exploited resulting in the reduction of purity in soil, due to excessive use of chemical fertilizers, insecticides and pesticides. Indiscriminate deforestation has resulted in reduction of rainfall and land erosions. The degrading effects of Environment leads to various natural calamities like Drought, Floods, Cyclones, global warming, melting glaciers, raising sea levels and etc. As a result the production of food grains decreases and made food crisis at a global level.

### *1.8 Water Crisis*

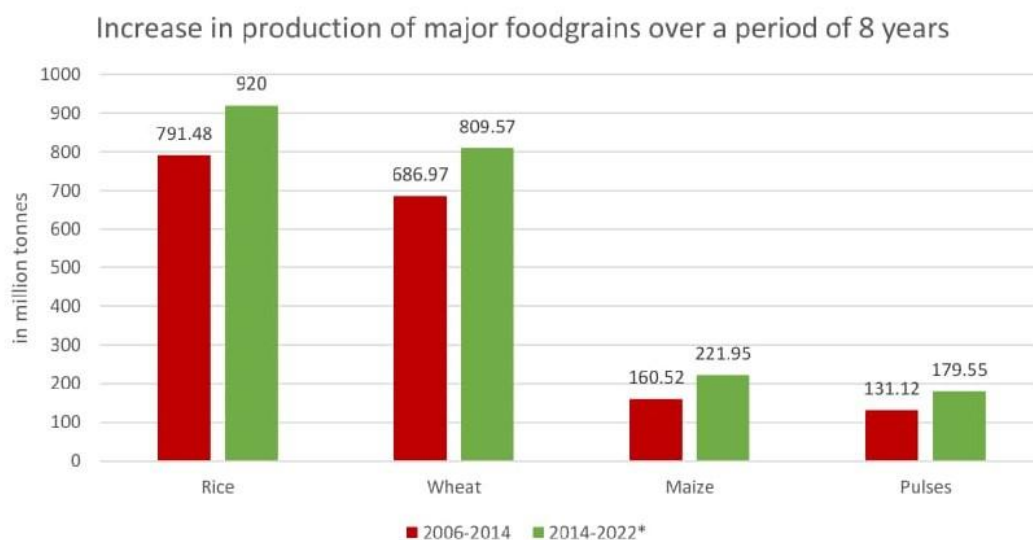
For Agricultural production huge amount of water is required. Water scarcity is at a global level. In most of the developing countries, population are primarily engaged in agriculture which is the primary source of income to maintain the livelihood of the people. To increase the productivity in agricultural lands, many damns have been made in unplanned way which has adversely affected the commons and the environment. To control flood and supply irrigation water the construction of big damns has occasionally helped. In villages for irrigation many tube- wells and submersibles have been installed in a very unconventional way which use the ground water in a huge scale and consume a large amount of electricity.

Approximately 1000tons of water is needed to produce only ton of wheat. This financial return is much lower than if this water is capitalized in industrial sector. In this case the non-food grains like fruits, vegetables and animal products for daily use should be raised as a auxiliary to rice and wheat.

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### Analysis of the Study

- Food grains – 316.06 million tonnes
- Rice – 127.93 million tonnes
- Wheat – 111.32 million tonnes
- Nutri / Coarse Cereals – 49.86 million tonnes
- Maize – 32.42 million tonnes
- Pulses – 26.96 million tonnes
- Tur – 4.00 million tonnes
- Gram – 13.12 million tonnes



<https://pib.gov.in/PressReleasePage.aspx?PRID=1798835>

India is a country that has a complex relationship between consumption and production when it comes to food scarcity. India is a major food producer and exporter, with significant portion of its population employed in agriculture. India also faces many challenges related to food scarcity and malnutrition, with a large percentage of its population living below poverty line.

It is indeed good news that the total food grain production in India has increased to a record 316.06 million tonnes in 2021-2022, which is higher than the production of food grains during 2020-2021 by 5.32 million tonnes. As per the trends and total increase in production of food grains over a period of 16years, the production had stagnated during the years 2011-12 to 2015-16 after reaching a high of 259.29 million tonnes in the year 2011-12. However, a combination of

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various factors, including an array of measures taken by the government, has resulted in a consistent year-on-year rise in production.

### **Conclusion**

- I. There is a need for effective and efficient food security policy to consider proper availability of nutritious food such as millets barley ragi etc. as one of its goals.
- II. A well established supply chain management is useful for guiding the development of food security policy towards achieving efficiency, as it is an integrated approach to creating value and competitiveness.
- III. Future smart crops – such as Amaranthus, Buckwheat, Minor Millet, Finger Millet, Foxtail Millet and pulses – were traditionally grown in India, making them a important sources of food and nutrition security. These Traditional crops are gradually becoming extinct due to lack of knowledge about their nutrient values. Farmers should educate people about their nutrient values and other many benefits received by an individual for consumption.
- IV. Raising more funds to bridge the production and nutritious gap brought by the agricultural supremacy of some staple crops such as rice, wheat, millets, pulses, dairy, vegetables, and fruits. It is estimated that over 31 million Indian farmers grow these crops and the inclusion of these crops in the law is likely to simulate production, contribution both to climate adaptation and food security. Adding to that the increased income of the farmers that grow these crops will receive when the Government buys their crops and India can make progress in addressing the problem of hunger, poverty and climate change in one targeted intervention.
- V. While addressing the gathering after inaugurating the “Global Millets (Shree Anna) Conference’, Modi noted that many states have included millets in their PDS system and suggested other states to follow the same. He also called for including the super food in the mid-day meal so that children can get proper nutrition. The Prime minister also stressed that India wants to share its agricultural practice with the world and learn from experiences from other countries. Usage of water must be done efficiently and effectively. The farmers must plan their crops according to the climate so that they can use minimal water to get the maximum yield. Water Scarcity along with Food Scarcity has also become a major Issue in the Global Levels and needs to be addressed.

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- VI. Environmental precautions must be taken while producing the yield and needs to be grown naturally to avoid the adverse effects of the nature and to keep in mind not to pollute our nature as the adverse effect which we get back could be much greater and stronger.
- VII. Overall, while India is a major food producer, it still faces significant challenges related to food scarcity and malnutrition. Significant investments in infrastructure, technology and policies have to be made that ensures that everyone has access to nutritious and affordable food.

### **References:**

- Decan Herald – Millets can tackle challenges of global food security. Food insecurity and hunger continue to plague India.
- NDTV article on Food Crisis in India.
- Wikipedia – Article on Food Security in India.
- [https://en.m.wikipedia.org/wiki/Food\\_security\\_in\\_India#:~:text=According%20to%20UNO%20%2DIndia%2C%20there,of%20food%20security%20index%202022.](https://en.m.wikipedia.org/wiki/Food_security_in_India#:~:text=According%20to%20UNO%20%2DIndia%2C%20there,of%20food%20security%20index%202022.)
- <https://www.drishtiiias.com/daily-updates/daily-news-editorials/food-security-in-india>

**PERCEPTION OF CLOUD COMPUTING IN ACADEMIC LIBRARIES**

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**ABSTRACT**

Technological developments have affected not only the format and sources of information, but also the services provided by the libraries. Libraries and their resources have moved to an electronic world. As a result, library patrons can access information resources from outside the physical library through their computers. These technologies can be widely adopted but will have to endure through many alterations by means in which they are offered by the libraries.

With the use of information technology academic libraries have appeared and contributed effective services to education processes in different ways. The ICT enabled libraries facilitate better accessibility to electronic information sources, help faculty to use information technology in their teaching and research activities, help library staff to increase their skills for using exclusive information systems and help students for their search in electronic sources and web pages. Cloud computing has emerged as new horizon in an information technology. Adoption of cloud computing is not an easy task for academic libraries.

The features and its implications, advantages and disadvantages, have to be seriously considered before placing data on the cloud libraries. The present paper provides brief information on cloud computing and its application for library services with a special reference to academic libraries.

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**Key Words:** *Cloud computing, Information technology, Academic Libraries, Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS)*



### **1. INTRODUCTION**

Academic libraries are the libraries attached to colleges and universities. Preservation of and access to knowledge and information is their main intent to support the mission of the respective colleges and universities. The concept of digital and virtual libraries are emerged a deep impact of Information and communication technology (ICT) on all types of libraries. They emphasize the external and internal changes in academic libraries.

ICT creates both opportunities and challenges for library and information professionals (LIPs). There is a paradigm shift from standalone libraries to library and information networks, from printed publications to digital documents and from ownership to open access. This transition is the result of the impact of ICTs, the Internet and the web on different types of academic and research libraries.

The organization culture, library leadership and trained library personnel play a pivotal role in determining the role and status of academic libraries. LIPs are faced with a diametrically opposite situation with growing electronic resources on the one hand, and declining library budgets on the other. There is a lot of information on the web in the public domain. But LIPs are required to learn the art of finding needle from the hay stack. Information literacy is the way out to manage chaos on the web and end-user satisfaction.

Shared subscription, library consortia, institutional repositories, and open access archives are the outcome of our strategic response to deal with the challenge of declining library budget. For this reason, there is a need to analyze the problems in library resources management, complex demand of users and attraction of users towards cutting edge technologies in academic libraries (Jagtar Singh & Trishanjit Kaur, 2009).

Cloud computing is emerged as one of the most popular virtual technology for academic libraries to deliver the services in an effective manner. The new concept of cloud and libraries has generated a new model called cloud libraries. Though the usages of cloud computing may vary with the libraries nature, services and information needs but most common usages of cloud computing with in libraries can be development of digital libraries, corporate cataloguing, acquisition, storage and sharing the resources on virtual environment on the web (Kaushik & Kumar, 2013).

### 2. OBJECTIVES OF THE STUDY

Main objective of the paper is to determine the factors influence the adoption of cloud computing in academic libraries.

### 3. REVIEW OF LITERATURE

**Steve MorganJeremy Atkinson (2000)** discusses the significant changes of academic libraries such as lifelong learning, frontline services and their quality, electronic libraries. The author suggests that LIS professionals to cope up with these continuous change.

**FaranakMohsenzadeh Alireza Isfandyari-Moghaddam (2009)** investigates the status of the application of information technology in academic libraries located in Kerman, Iran. Results of the study show that the level of application of information technology in Kerman academic libraries is acceptable but they should improve their status to match with ever increasing demand for better librarian services at Kerman academic libraries.

**Nuria Lloret Romero (2012)** describes the features of cloud computing. Cloud computing is a highly scalable platform promising quick access to hardware and software over the internet, in addition to easy management and access by non-expert users. It relies on technologies such as virtualization, programming techniques such as multi-tenancy and/or scalability, load balancing and optimal performance, to ensure that resources are offered quickly and easily.

**Sanchati and Kulkarni (2011)** describe the current status of user cloud service models in university libraries. The model would let libraries maintain more control over the applications and data stores that contain sensitive, private information about patrons. The study explores some of the security issues surrounding data location, mobility and availability. The authors opine that infrastructure virtualization and cloud computing are particularly attractive choices which is challenged by both growth in the size of the indexed document collection, new features and most prominently usage.

**Mayank Yuvaraj (2016)** explore the perceptions of librarians engaged in Indian academic libraries towards cloud computing. Majority of the respondents showed their concern over security and data privacy in cloud. The study reveals that library professionals are using

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Cloud-computing tools in their daily works. They want to adopt cloud computing in the libraries to improve library services and avoid redundancy of works. Ubiquitous availability, economy and the various service layers are the core drivers of its adoption in the libraries.

### **4. MEANING OF CLOUD COMPUTING**

Cloud computing, the new technology model is the use of computer resources i.e. hardware and software delivered as a service over a network. It is named after the use of cloud-shaped symbol. It contains in system diagrams as an abstraction for the complex infrastructure. Cloud computing has been coined as an umbrella term to describe a category of sophisticated on-demand computing services initially offered by commercial providers such as Amazon, Google, and Microsoft. It denotes a model on which a computing infrastructure is viewed as a “cloud,” from which businesses and individuals access applications from anywhere in the world on demand. The main principle behind this model is offering computing, storage, and software “as a service.”

According to **The National Institute of Standards and Technology(NIST)** “Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources e.g., networks, servers, storage, applications, and services that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models” (Mell and Grance, 2011).

**Gartner IT Glossary** defines cloud computing as a style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service using Internet technologies (Gartner IT Glossary, 2014).

**Buyya et al.** define “A Cloud is a type of parallel and distributed system consisting of a collection of inter-connected and virtualised computers that are dynamically provisioned and presented as one or more unified computing resources based on service-level agreements established through negotiation between the service provider and consumers” (Buyya et al., 2009). Cloud computing allows the library to provide IT infrastructure on a subscription model that may be difficult to acquire and manage otherwise, to employ a pay-on-demand resource model and to scale its technology resources. At present Cloud libraries are becoming very popular in all countries. They use cloud architecture in which internet based ‘on demand service’

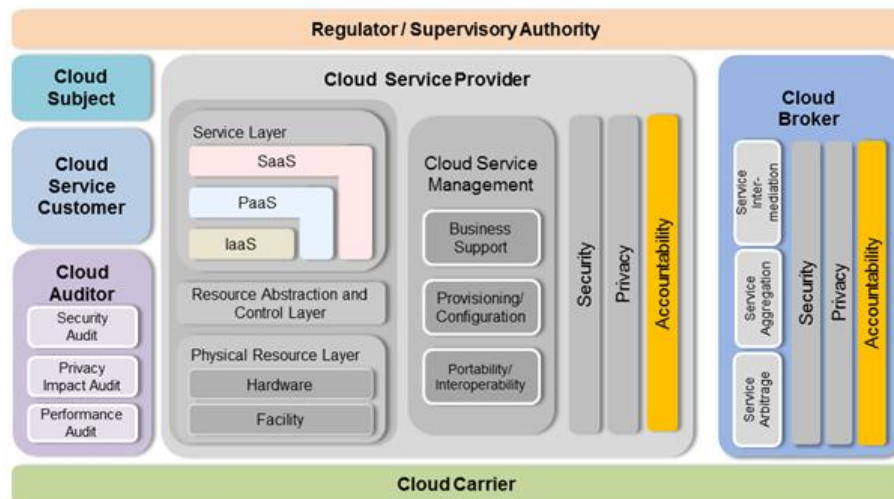
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is provided. They provide flexible e-book or a document lending service through in-library hardware. Catalogue searching facility in the library is provided through the touch-based terminals and books selected will be checked out to users along with e-readers. Users can borrow digital books in their mobile devices, iPads and android based tablets.

### 5. NEED OF CLOUD COMPUTING IN ACADEMIC LIBRARIES

- Traditional computing libraries need of large infrastructure which results more cost but in cloud computing centralization of infrastructure in between with lower cost.
- In traditional computing libraries security cost is high whereas centralization on network in cloud lessen the cost
- Maintenance of computers is very difficult & costly but in cloud it is easy to access less number of computers over the network.
- In traditional computing reliability is less due to drastic changes in the technology. The centralized network in the cloud computing give more reliability.
- Hardware and functionality traditionally installed can be used for development of software's through networks in the internet cloud
- Programmers can get developed software's from internet so for development of new software's time span is limited. The programmers can use constantly updated software components that can be embedded with other web applications.

### 6. NIST CLOUD COMPUTING REFERENCE ARCHITECTURE



(<https://cloudaccountability.eu/reference-architecture/51>, 2016)

The entire cloud architecture is aimed at providing the users with high bandwidth, allowing users to have uninterrupted access to data and applications, on-demand agile network with possibility to move quickly and efficiently between servers or even between clouds and most importantly network security.

NIST Cloud Computing Reference Architecture divided into three layers i.e. Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). SaaS has changed the concept of software as a product to that of a service instead. The software runs in the cloud and the user can access it via the Internet to work on an application.

PaaS enables powerful tools for developers to create the applications, without having to deal with concerns about the infrastructure. IaaS provides complete infrastructure resources e.g. servers, software, network equipment and storage. With IaaS, consumers do not have to purchase the latest technology, perform maintenance, upgrade software or buy software licenses (Anuar et al., 2013).

There are four types cloud computing deployment private clouds, public clouds, community clouds and hybrid clouds (Mell and Grance, 2011). Public clouds have open access, private clouds run within organizations, community clouds contain resources that are shared with others in the community and hybrid clouds encompass two or more cloud models.

### **7. PERCEPTION OF CLOUD COMPUTING IN ACADEMIC LIBRARIES**

The development of cloud computing provides an opportunity for library automation beyond computerizing manual functions. The following discussion gives inputs to understand the potential areas of cloud computing in academic libraries

- According to Sorensen and Glassman (2011), cloud-based applications offer libraries new ways to present information or offer services that were previously unaffordable or unavailable. There are four core areas of cloud computing solutions in libraries i.e. technology, data hosting archives, information and community (Patel et al., 2012).
- The scholars have opined that cloud computing was already in practice before the concept gained momentum and there are ample possibilities in the future. For instance, Hoy (2012) asserts that many library patrons are already using cloud products, such as

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- Gmail, Google Docs and bibliographic management tools, for their daily needs. Academic libraries use database vendors or integrated library system providers who provide external servers to host library software and data in the cloud (Cohn et al., 2002)
- In the field of library automation, there are several commercial suppliers already offering various adaptations of their products which make the use of the cloud possible to a lesser or greater extent (Romero, 2012). According to Prince (2012), some of the cloud-based options for libraries include IaaS- or PaaS-hosted ILS systems, in which libraries buy their ILS software from one vendor and host it on another vendor's servers. Major ILS vendors exclusively having SaaS deployment options for libraries are: ExLibris, VTLS and Cyber Tools.
- Observing the future prospects of cloud-based library services, Wale (2011) argues that discovery tools can be embedded in commonly used applications, such as course management systems and institutional portals, enabling libraries to meet the needs of users wherever they are.
- Virtual reference services and research guides can be provided in libraries through software such as LibChat, QuestionPoint and LibGuides, which are all hosted on the cloud (Luo, 2013).
- Majority of the academic librarians face connectivity challenges due to scarcity of the fund towards cloud computing platforms or enhancing bandwidth are not always priorities in developing region. In addition, to develop a cloud-based library, there is a need of librarians' training and practice to address the issues of cloud in reality (Mavodza, 2012).

### **8. APPLICATION OF CLOUD COMPUTING IN ACADEMIC LIBRARY**

Cloud computing technology provides libraries an opportunity to improve their services and relevance in information society. In the Academic libraries, the following possible areas are identified where cloud computing applications can be applied.

- **Library Automation and House-Keeping Activities:** Automation in most of the libraries are carrier local servers by using different types of commercial or open source integrated management software and managed by internal IT/library staff. Nowadays

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- software vendors offer this on the cloud (SaaS model) which enables the library from investing on hardware and undertaking maintenance, software update backup etc.
- **Searching Library Data:** Cloud computing facilitates libraries for searching and sharing its data for years together. For example, OCLC World Cat service is one of the popular services for searching library data using cloud computing technology.
- **Building Community Power:** libraries to build networks among the libraries and information science professionals as well as other interested people including information seekers by using social networking tools such as Twitter and Face book. It provides the platform for innovation and sharing the intellectual conversations, ideas and knowledge
- **Building Digital Repositories:** An efficient way to manage resources, information and library related services is to maintain a digital library. The user may be facilitated access via network. Many open source software are providing a platform to digital form, investing on hardware and undertaking MA backup.
- **Library Website Hosting:** Cloud computing technology also facilitates the organizations including libraries to host their own websites. For example, Google Sites serves as an example of a cloud service for hosting websites outside of the library's servers and allowing for multiple editors to access the site from varied locations (Gandotra, Tyagi & Tiwari, 2019).

### **CONCLUSION**

Academic libraries are operating in a rapidly changing environment. They should be aware that new promotional and marketing strategies are required to ensure that they continue to reach their users and maintain the relevance of their service offerings.

Majority of the library users are comfortable using the spaces provided by information-based industries. Academic librarians are finding ways of making use of the new technologies to best advantage, for example with the use of handheld devices such as iPads and Kindle for attending to patron needs, or assisting them in creating useful research-related tags.

Therefore it is realized that cloud computing technology enables new streamlined workflows for cooperation and community building among academic libraries.

### REFERENCES

- Buyya, R., Chee Shin Yeo, Srikumar Venugopal, & James Broberg, Ivona Brandic (2009). Cloud computing and emerging IT platforms: Vision, hype, and reality for delivering computing as the 5th utility. *Future Generation Computer Systems*, 2009. <http://arxiv.org/ftp/arxiv/papers/0808/0808.3558.pdf>
- Cohn, J.M., Kelsey, A.L., Fiels, K.M. and Salter, D. (2002), *Planning for Integrated Systems and Technologies: A How-to-do-it Manual for Librarians*, Facet, London.
- Faranak Mohsenzadeh Alireza Isfandyari-Moghaddam (2009). Application of information technologies in academic libraries. *The Electronic Library*, 27 (6), 986 – 998.
- Gandotra, N., Tyagi, N. & Tiwari, S. (2019). Application of Cloud Computing Technology in Libraries. *Journal of Advancements in Library Sciences*, 6(2), 16-23.
- Gartner IT Glossary. <<http://www.gartner.com/it-glossary/cloud-computing/>> (Retrieved on 21/02/2023).
- Hoy, M.B. (2012). Cloud computing basics for librarians”, *Medical Reference Services Quarterly*, 31 (1), 84-91.
- <https://cloudaccountability.eu/reference-architecture/51-conceptual-model-reference-architecture-ra> (Retrieved on 21 Feb.2023). (Retrieved on 24/02/.2023).
- Jagtar Singh and Trishanjit Kaur (2009). Future of Academic Libraries in India : Challenges and Opportunities. ICAL 2009 – Vision and Roles of the Future Academic Libraries
- Kaushik, A. & Kumar, A. (2013). Application of cloud computing in libraries. *International Journal of Information Dissemination and Technology*, 3(4), 270-273.
- Luo, L. (2013). Reference librarians’ adoption of cloud computing technologies: an exploratory study. *Internet Reference Services Quarterly*, 17 (¾), 147-166.
- Mavodza, J. (2012), The impact of cloud computing on the future of academic library practices and services, *New Library World*, 114 (¾), 132-141.



**RBI'S PROMPT CORRECTIVE ACTION FRAMEWORK**

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**Abstract:**

Objective transparent and non-discretionary PCA norms administered by many advanced economies globally to mandate progressive penalties against banks with weak financial metrics are sput under watch by the RBI. The RBI Introduced PCA Framework in December 2002 along the lines of the US Federal deposit insurance Corp's PCA Framework and has issued revised guidelines effective from April 1, 2017. It aims to check the problem of non-performing Assets (NPAs) in the Indian banking sector. PCA is intended to help alert the regulator as well as investors and depositors if a bank is heading for trouble. PCA is invoked on banks if they breach any of the regulatory trigger points namely CRAR, NNPA, ROA and leverage ratio. Depending on the three risk thresholds set under PCA framework, banks are put into two types of restrictions – mandatory and discretionary. RBI had placed 11 state run banks Allahabad bank, united bank corporation bank Indian overseas bank and UCO bank and many more are under PCA framework after they breach the risk thresholds.

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**Key words:** *Banks, NBFC, Frame. PCA*

**Introduction:**

Mandatory restrictions are imposed on dividend, branch expansion, directors compensation discretionary restrictions are imposed on risky lending and high cost deposits. However, payments banks and small finance banks (SFBs) have been removed from the list of lenders where prompt action are initiated. The new provisions were applicable from January 2022. RBI has pushed back suggestions by the government nominees to ease the PCA norms for banks because RBI's argument is PCA move had already improved the financial health of some of the lenders under stress. RBI has pushed back suggestions by the government nominees to ease the PCA norms for banks because RBI's argument is PCA move had already improved the financial health of some of the lenders under stress.

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### **Objectives of the study:**

- To know the reasons for imposition of prompt corrective action framework on banks
- To analyse and evaluate the financial health of banks under PCA
- To find statistical significance of the changes in various bank performance indicators
- To address the issues of the non- performing assets in the banking system of India
- Prompt corrective action needs to inform the depositors and investors when bank is in crisis

### **Methodology:**

- Empirical and analytical in nature
- Based on the secondary sources of data, RBI's financial stability reports, published speeches of RBI's governor and deputy governors, financial reports of banks under PCA, journals and newspaper
- Various tests like paired sample T-test, one way repeated measures ANOVA, post- hoc test Bonferroni correction

#### **• What has changed now?**

- The notification has removed return on assets as an indicator to qualify for PCA
- Further, the 2017 notification applied to scheduled commercial banks but excluded regional rural banks from its purview, while 2021 version excludes small finance banks and payment banks too
- In the latest rules, the RBI has clearly spelt out that exit from the PCA would be based on 4 continuous quarterly results , one being audited annual financial statement
- Controls over capital adequacy indirectly include profitability

#### **• Limitations of the study and Delimitations of the study:**

- The study was in 11 public sector banks and one private sector bank where PCA was implemented
- This may affect the generalization of the findings of the study to other banks
- The period of study was only the financial year 2017-2018 and 2018-2019 (up to September 2018 only)
- Lack of capital: PCA Framework applies to banks whose capital slips below the minimum regulatory threshold of 9 percent

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- No let up in deteriorating asset quality, higher NPAs are not good for the health of a bank as it reflects poor credit standards and failure to recover loans through collateral.
- Balance sheet clean-up drive is already underway
- Not much on the governance or reform front

### Review of literature

	<b>Name of the author</b>	<b>Title of the paper</b>	<b>objective</b>	<b>findings</b>	<b>Research gap</b>
1	RBI report	report of the working group on resolution regime for financial institution, RBI, 2014	To develop a framework preventive as well as early intervention measures	Putting in place a prompt corrective action framework that incorporates graded triggers at pre specified levels for taking early actions by regulators is important for the financial sectors	Study of the impact of RBI report on the performance of banks and the feedback mechanisms
2	RBI report	RBI'S financial stability report June 2018	To project GNPA, CRAR	Worsening GNPA and CRAR of PCA banks	Study of the performance indicators of PCA implemented banks
3	Benston and kaufmann& others	PCA framework	To provide theoretical support for PCA framework	Optimal capital regulation	Study the significance of PCA framework on ROA
4	Himadri Bhattacharya	“centre unjustified in lashing out at RBI	To analyse the reasons for differences between the RBI and the central government	Special treatment for MSME borrowers, lending to NBFCs	To find hindrances in implementation of PCA

### Hypothesis

1. H0: There is no statistically significant difference between the CRAR of 2017 and 2018 of PCA implemented banks.  
H1: There is statistically significant difference between the CRAR of 2017 and 2018 of PCA Implemented banks
2. H0: There is no statistically significant difference in the net profit between the various time- points of march, June and September 2018  
H1: There is statistically significant difference in the net profit between the various time-points of march, June and September 2018
3. H0: There is no statistically significant difference in the NNPA between the various time-points of march, June and September 2018  
H1: There is statistically significant difference in the NNPA between the various time points of march, June and September 2018
4. H0: There is no statistically significant difference in the ROA between the various time-points of march, June, and September 2018

### List of PCA implemented banks with dates of implementation

Banks	Date of implementation of PCA	BANKS	Date of imposition of PCA
United bank of India	<b>Feb 2014</b>	<b>Central bank of India</b>	<b>June 2017</b>
Indian overseas bank	<b>August 2015</b>	<b>Bank of Maharashtra</b>	<b>June 2017</b>
UCO Bank	<b>May 2017</b>	<b>Bank of India</b>	<b>December 2017</b>
IDBI bank	<b>May 2017</b>	<b>Bank of India</b>	<b>December 2017</b>
Dena bank	<b>May 2017</b>	<b>Allahabad bank</b>	<b>January 2018</b>

### PSB'S UNDER PCA – GROSS NPA'S (%)



# PROMPT CORRECTIVE ACTION

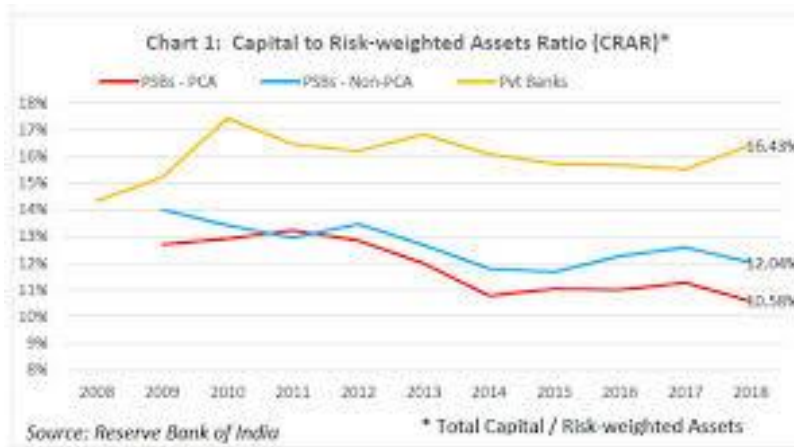
**BANK OF INDIA:**  
**10<sup>th</sup> PSU Bank To**  
**Come Under RBI**  
**Prompt Corrective**  
**Action Plan**

PSU BANK	NET NPA (Q2FY18)
IDBI Bank	16.1%
IOB	13.9%
Bank of Maha	12.7%
United Bank	11.6%
Dena Bank	10.6%
Corporation Bank	10.2%
UCO Bank	10%
Central Bank	9.6%
OBC	9.4%
Bank Of India	6.5%

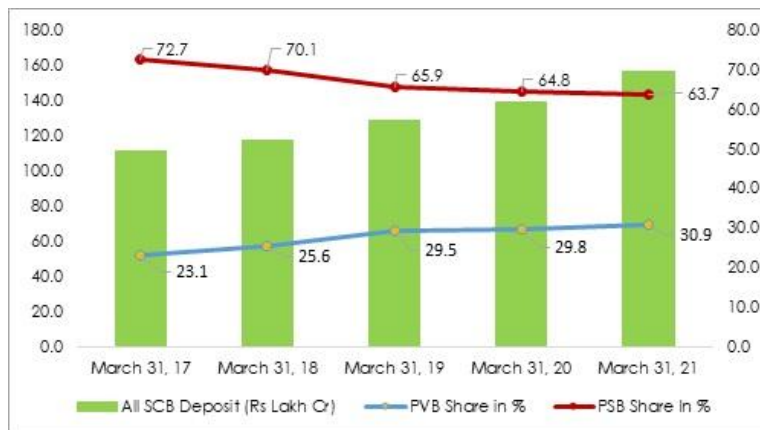
**PCA matrix – AREAS, INDICATORS, AND RISK THRESHOLDS**

PCA matrix - Areas, indicators and risk thresholds				
Area	Indicator	Risk Threshold 1	Risk Threshold 2	Risk Threshold 3
<b>Capital</b> (Breach of either CRAR or CET 1 ratio to trigger PCA)	CRAR- Minimum regulatory prescription for capital to risk assets ratio + applicable capital conservation buffer(CCB)	upto 250 bps below Indicator	more than 250 bps but not exceeding 400 bps below Indicator	-
	current minimum RBI prescription of 10.25% (9% minimum total capital plus 1.25%* of CCB as on March 31, 2017)	<10.25% but >=7.75%	<7.75% but >=6.25%	-
	<b>And/ Or</b>			
	Regulatory pre-specified trigger of Common Equity Tier 1 (CET 1min) + applicable capital conservation buffer(CCB)	upto 162.50 bps below Indicator	more than 162.50 bps below but not exceeding 312.50 bps below Indicator	In excess of 312.50 bps below Indicator
	current minimum RBI prescription of 6.75% (5.5% plus 1.25%* of CCB as on March 31, 2017)	<6.75% but >= 5.125%	<5.125% but >=3.625%	<3.625%
	<b>Breach of either CRAR or CET 1 ratio to trigger PCA</b>			
<b>Asset Quality</b>	Net Non-performing advances (NNPA) ratio	>=6.0% but <9.0%	>=9.0% but < 12.0%	>=12.0%
<b>Profitability</b>	Return on assets (ROA)	Negative ROA for two consecutive years	Negative ROA for three consecutive years	Negative ROA for four consecutive years
<b>Leverage</b>	Tier 1 Leverage ratio	<=4.0% but >= 3.5% (leverage is over 25 times the Tier 1 capital)	< 3.5% (leverage is over 28.6 times the Tier 1 capital)	

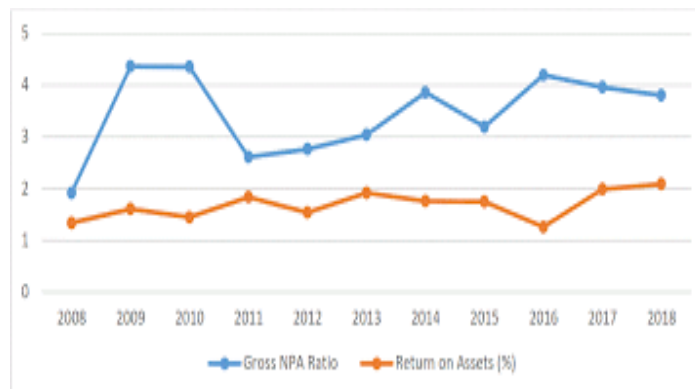
**CAPITAL TO RISK WEIGHTED ASSETS RATIO (CRAR)**



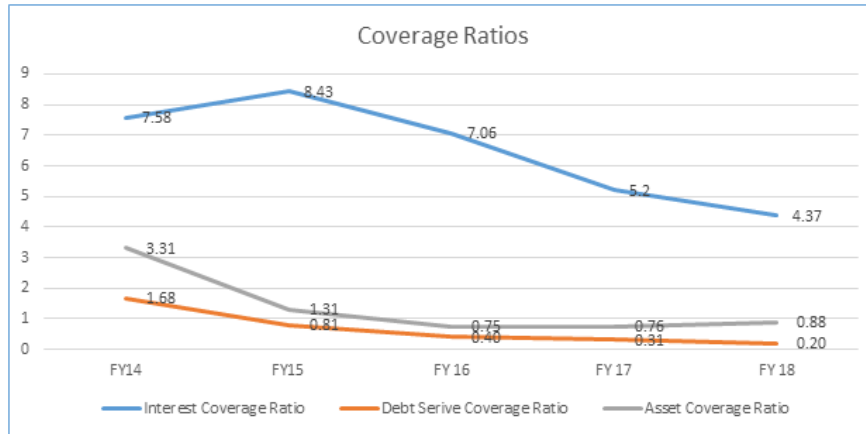
**YEARLY GROWTH IN ADVANCES**



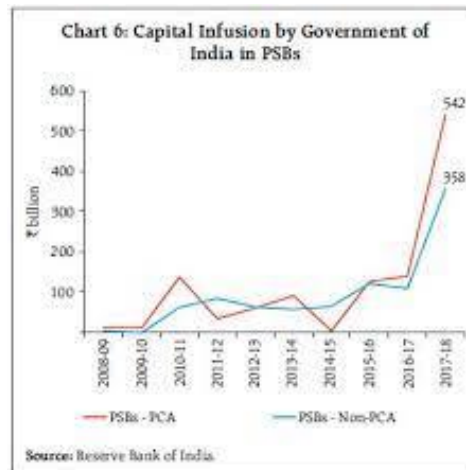
**Net non performing assets ratio and return on assets**



## Provision coverage ratio



## Capital infusion by government of india



## Suggestions

- Special supervisory interactions
- Strategy related actions
- Governance related actions
- Capital related actions
- Credit risk related actions
- Market risk related actions
- HR related action

### Conclusion

- The PCA Framework could help to mitigate financial stability risks by arresting the deterioration in the banking sector, so that further capital erosion is restricted and banks are strengthened to resume their normal operations
- In extreme cases, the PCA framework provides for mergers or even wind up the non-compliant banks. If placing banks under PCA was the first step to stabilize these feeble banks, deeper reforms in governance, human resource capabilities and risk evaluation system modernization are needed to make these banks capable again to compete
- Private sector banks will continue to take market share away from public sector banks bound by RBI's so called prompt corrective action norms. However, recoveries due to the bankruptcy code and recapitalization of banks will help these lenders pose competition to their private sector counterparts from fiscal 2021

### Reference:

- Buyya, R., Chee Shin Yeo, Srikumar Venugopal, & James Broberg, Ivona Brandic (2009). Cloud computing and emerging IT platforms: Vision, hype, and reality for delivering computing as the 5th utility. *Future Generation Computer Systems*, 2009. <http://arxiv.org/ftp/arxiv/papers/0808/0808.3558.pdf>
- Cohn, J.M., Kelsey, A.L., Fiels, K.M. and Salter, D. (2002), *Planning for Integrated Systems and Technologies: A How-to-do-it Manual for Librarians*, Facet, London.
- Faranak Mohsenzadeh Alireza Isfandyari-Moghaddam (2009). Application of information technologies in academic libraries. *The Electronic Library*, 27 (6), 986 – 998.
- Gandotra, N., Tyagi, N. & Tiwari, S. (2019). Application of Cloud Computing Technology in Libraries. *Journal of Advancements in Library Sciences*, 6(2), 16-23.
- Gartner IT Glossary. <<http://www.gartner.com/it-glossary/cloud-computing/>> (Retrieved on 21/02/2023).



**EFFICACY OF MUDRA YOJANA OF FUNDING THE UNFUNDED ON  
WOMEN ENTREPRENEUR AND EMPLOYABILITY**

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**Abstract:**

Women make up nearly half of India's total population, but when it comes to employment and entrepreneurship, women's participation rate and opportunities are extremely low. Since women come under the vulnerable section of the population, careful attention or due importance should be given to them to come out of their vulnerability in terms of economic, political and social terms and lead an independent life. Women's empowerment can be achieved only when they are economically and financially independent. To support entrepreneurial growth and overcome the problem of lack of capital, micro finance seems to be an alternative solution. Several microfinance institutions are already functioning in the economic to facilitate easy financing to the poor, but their effectiveness is still a question. The Government of India has launched Pradhan Mantri Mudra Yojana (PMMY), which aims to fund the unfunded and encourage small and medium-sized entrepreneurs, which supports individual financially to start an enterprise or expand the existing one by providing collateral – free loans. Further, it encourages female participants by charging lower interest rates. The present study examines the efficiency of Mudra loan in promoting women entrepreneurship and women employability. The results suggest micro-credit through Mudra Yojana encourages female entrepreneurship, raises earnings and employability and thereby empowers them financially, socially, psychologically and in the political arena.

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**Keyword:** *Mudra yojna, employability, women entrepreneur, loan*

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### **INTRODUCTION**

Women entrepreneurs from across the world, especially developing countries, suffer from several challenges in their growth and development process. Major barriers to the entrepreneurial journey of women from developing nations are lack of easy access to capital and ownership of land or assets as women in such countries belong to male dominated societies. Studies have determined that lack of access to financial credit and impediments to procurement of finance are the biggest constraints in the development process of small and medium – sized enterprises. In case of women the condition is even worse. Generally, it is believed that women undertake an income generating activity on a relatively small scale as compared to men. Such activities require smaller funds which the banks are reluctant to lend because such loans are not proved to be cost effective. Moreover, women entrepreneur lack experience in handling and running an enterprise and may not have any history of financial borrowings or loan repayment which exaggerates the problem of financing.

The current scenario points towards the need for programmes which specifically target and promote women entrepreneurship. To promote entrepreneurial growth and overcome the problem of lack of capital, microfinance seems to be an alternative solution. Microfinance can contribute immensely to poverty alleviation through facilitation of new venture creation and entrepreneurship. Microfinance can contribute immensely to poverty alleviation through facilitation of new venture.

To overcome these constraints Government of India (GOI) has been introduced a number of financial inclusion initiatives such as Pradhan Manthri Jan Dhan Yojana (PMJDY) Pradhan Mantri Suraksha Beema Yojana (PMSBY), Pradhan Mantri Jeewan Jyoti Beema Yojana (PMJJBY), Pradhan Manthri Mudra Yojana (PMMY) etc., for the weaker section, low-income groups, small business man and micro enterprises. For developing the micro and small business units the government of India launched a financial inclusion scheme on 8<sup>th</sup> April 2015 called Micro Unit Development and Refinance Agency, or MUDRA. The guidelines of MUDRA scheme are issued by Department of Financial Services. Government of Indian Indicated that all

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banks are required to give the loan to small and micro enterprises engaged in Trading and Manufacturing, processing, service sector activities for a loan.

Out of total beneficiaries' women receive the majority share in the scheme, which is almost more than 50% and under the Shishu Category, the number of accounts opened and loans sanctioned to women was more than 60%, which is good sign that women are becoming entrepreneurs and playing in the main stream economic activity along with men.

To assist the micro entrepreneurs to come out of the tide of difficulties in the times of covid and lockdown, the government has announced an interest subvention scheme of 2% on Shishu scheme beneficiaries. In terms of the number of accounts opened and loans sanctioned to women entrepreneurs, the Mudra Yojana is mainly acting as a catalyst in promoting women's entrepreneurship and generating employment in India.

### **REVIEW OF LITERATURE**

- **Raj Kumar Thathera, Pallavi Singh Yadav, (Feb 2023).**

“Role of Mudra Bank in Women Empowerment” The terms refer to women's economic, political, and social advancement. Despite advances in recent decades, many women throughout the world continue to face different forms of gender – based discrimination and violence.

The loan sanctioned under the Mudra system is divided into three categories: Shishu, Kishore and Tarun, Women entrepreneurs being the primary beneficiaries. Women account for about half of all genuine eligible beneficiaries of this system, with accounting for nearly half of all beneficiaries, with women accounting for more than 60% of financial aid under the Shishu category.

- **Pushpender Kumar, DivyaNandrajog, (Nov 2021)**

“The impact of PMMY on socioeconomic development of women in India” The study aims to investigate the impact of Mudra Yojana on the socioeconomic growth and development of women in India. Graphical and tabulation indicate a positive role of mudra in improving the status of women in our society.

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Mudra loan has made women financially independent and helped them establish their own businesses. Many respondents have also reported an increase in their monthly household income and savings after taking loan.

- **Varun Agarwala, Sudarshan Maity, TarakNathuSahu( 2022)**

“Female entrepreneurship, employability and empowerment: impact of the mudra loan scheme” The study is based on 417 female beneficiaries from the tribal districts of West Bengal, India, investigates how financial support has benefitted women in their socio – economic growth.

It evaluates the scheme’s effect based on women’s employability and empowerment level. The result suggest micro-credit through Mudra yojana encourages female entrepreneurship, raises earnings and employability, and thereby empowers them financially, socially and psychologically and in the political arena.

- **Debosmita Sarkar, Sunaina Kumar, (2022)**

“Women – centric Approaches under MUDRA YOJANA: Setting G20 Priorities for the Indian Presidency”.

It offers recommendation G20’s priorities for improving women’s financial inclusion and promoting female entrepreneurship, under the presidency of India. The imperative include promoting gender parity in economic participation through education, digital and financial inclusion, and legal protection, among others. Moreover, establishing a thriving ecosystem of female entrepreneurs can help other unemployed women- led venture.

### **OBJECTIVES:**

1. To determine the Mudra Yojana and its initiatives to promote women’s entrepreneurship.
2. To examine the role of Mudra Loan in providing new employment opportunity among women.
3. To Analyze the Mudra Yojana components that benefit women the most.

### **RESEARCH METHODOLOGY:**

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Descriptive research with secondary data from the Mudra website, Mudra Yojana annual reports, periodicals, websites, national and international journals, and other sources forms the basis of the study. To clarify the goal, statistical methods like bar graphs, charts have been used.

### **COMPONENTS**

The components of mudra yojana are Shishu, Kishore and Tarun which are classified based on total quantity of amount to be sanctioned. Under this mudra card is also available to the borrower.

<b>COMPONENTS OF MUDRA YOJANA</b>		
<b>SHISHU</b>	<b>KISHOR</b>	<b>TARUN</b>
Up to 50,000	50,000 – 5,00,000	5,00,000 – 10,00,000
<b>Eligibility:</b> This scheme aimed to cater the financial needs of proprietor for meeting the initial expenses of business unit	<b>Eligibility:</b> The scheme aimed to improve running business and to divert the business into profitable ventures	<b>Eligibility:</b> Entrepreneurs who have already started their business and want additional funds for expansion and renovation are eligible for this scheme

### **DATA ANALYSIS:**

Micro Units development agency publishes annual data of mudra beneficiaries and mudra accounts in its official websites for all the stakeholders concerned. Data's are classified elegantly in terms of region wise, state wise, gender wise, caste wise (OBC, SC & ST), bank wise etc., data are also classified in terms of performance wise also. Below mentioned data is the extracted data from the annual report of mudra official website and only women beneficiary data are extracted for the analysis purpose.

**TABLE – 1**

WOMEN BENEFICIARIES ON THE BASIS OF COMPONENT WISE								
YEAR	SHISHU		KISHOR		TARUN		TOTAL	
	No of A/Cs	Amount Sanctioned	No of A/Cs	Amount Sanctioned	No of A/Cs	Amount Sanctioned	No of A/Cs	Amount Sanctioned
2017-18	3,21,44,132	8,0371.59	13,35,192	16,586.84	17,914	6,295.7	3,35,58,238 (69.72%)	1,03,254.14
2018-19	3,34,03,579	96,253.15	28,75,392	26,741.23	7,83,591	10,039.23	3,70,62,562 (62%)	1,33,033.62 (41%)
2019-20	3,57,17,217	1,09,660	29,88,307	26,477	3,97,825	9,045	3,91,03,349 (63%)	1,45,182 (43%)
2020-21	2,77,53,288	74,490	54,68,211	50,731	82,105	6,082	3,33,03,604 (66%)	1,31,303 (41%)
2021-22	3,04,41,921	89,621.66	78,92,778	70,027.90	94,560	6,772.91	3,84,29,259 (72%)	1,66,422.47 (49%)

**Source:** Researcher's compilation from <https://www.mudra.org.in/>

The data mentioned above is from the period of 2017-18 to 2021-22. Only women beneficiaries' data are taken to analyze whether there is an increase in the number of beneficiaries and number of accounts opened under this mudra scheme.

The major beneficiaries are women entrepreneur that is more than 60% number of accounts are opened and more 40% Amount sanctioned to women entrepreneur.

Above analysis is done on three categories i.e., Shishu, Kishore and Tarun, among three categories, Shishu loans had the largest share in terms of number of account opened and in the terms of Amount sanctioned.

In the year 2020-21 the loan sanctioned is reduced because of the impact of Covid 19.

**TABLE – 2 CATEGORIES OF MUDRA LOANS AND BENEFICIARIES DURING FY 2021-22 AND CUMULATIVE FOR 7 YEARS UNDER PMMY**

**(Rs. In Corer)**

CATEGORY	2021-22			Cumulative for 7 years since inception		
	No of A/cs	Amount Sanctioned	Amount Disbursed	No of Accounts	Amount Sanctioned	Amount Disbursed
Shishu	4,17,21,154 78%	1,24,747 37%	1,23,969 37%	29,94,58,353 86%	7,94,572 42%	7,85,188 43%
Kishore	1,10,88,206 21%	1,37,644 41%	1,33,389 40%	4,30,39,085 12%	6,53,456 35%	6,27,257 34%
Tarun	9,86,166 2%	76,719 23%	74,044 22%	68,53,997 2%	4,43,685 23%	4,26,911 23%
<b>TOTAL Out of the Above</b>	5,37,95,526	3,39,110	3,31,402	34,93,51,435	18,91,712	18,39,357
<b>Women</b>	<b>3,84,29,259 71%</b>	<b>1,66,422 49%</b>	<b>1,64,442 50%</b>	<b>23,82,32,171 68%</b>	<b>8,41,669 44%</b>	<b>8,06,422 44%</b>
New Entrepreneur Accounts	65,30,351 12%	72,685 21%	69,000 21%	7,46,02,102 21%	5,93,377 31%	5,66,865 31%
SC/ST/OBC	2,78,01,387 52%	1,25,226 37%	1,23,409 37%	17,76,81,351 51%	6,50,759 34%	6,36,078 35%

**Source: Researcher's compilation from <https://www.mudra.org.in/>**

The high percentage of women in terms of the number of accounts is mainly due to the high share of Micro Finance Institutions in Shishu loan, where women borrowers mostly make up the Clientele.

The share of women borrowers stands at 71% by the number of account and 49% by sanctioned amount and 50% by dispersed in the year 2021-22. And cumulative of 7 years stands at 68% by the number of account opened and 44% sanctioned amount and 44% amount dispersed.

**TABLE – 03 WOMEN GENERATED EMPLOYMENT THROUGH THE MUDRA  
SCHEME CATEGORY WISE**

<b>CATEGORY OF LOAN</b>	<b>No of women Beneficiaries</b>	<b>Total Employment generated by women</b>
Shishu	81,19,868	1,62,39,726
Kishore	33,31,725	66,63,450
Tarun	9,48,609	18,97,218
Total	12,400,202	2,48,00,394

**Source: Official website (<https://www.mudra.org.in/>)**

The Mudra Yojana aims to boost and promote entrepreneurship as a sustainable livelihood practice. Apart from creating self – employment, it targets that such enterprise be a source of employment to those unemployed. Thus, to assess whether the loan granted under the scheme contribute to additional employment. The scheme helped in generating 2,47,00,394 net additional employment during a period of approximately 3 years. Maximum number of employment generated by women is under the category of Shishu compared to Kishore and Tarun.

### **FINDINGS**

Findings of my research are that mudra yojana has played positive role for promoting women entrepreneurship in India.

The study provides a fair glimpse of the present scenario of women entrepreneurship, women employment and role of the Mudra loan in promoting holistic growth and development of women.

- Analysis is done on three categories i.e., Shishu, Kishore and Tarun, among three categories, Shishu loans had the largest share in terms of number of account opened and in the terms of Amount sanctioned.
- Cumulative of 7 years states that 23,82,32,171 Crore (68%) of Accounts opened, 841,6669 Crore (44%) amount sanctioned and 8,06,422 crore (44%) amount dispersed for women beneficiaries.



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- The scheme helped in generating approximately 2,48,00,394 net additional employment during a period 3 years. Maximum number of employment generated by women are under the category of Shishu compared to Kishore and Tarun..

### **CONCLUSION**

Women's rights are a critical pillar for the country's economy progress. If women were given the right opportunity and resources, they would bloom like flowers and share their fragrance to others. Women entrepreneur started taking its root in India by availing Mudra Loan. Vision of central government has a positive influence in providing growth opportunity for women. Women empowerment should not remain a slogan, but women equality in economic opportunities should be practiced to make a role model for inclusive growth and development with better life opportunity forever individual irrespective of gender. As per the conclusion is that mudra yojana has positive impact on women entrepreneurship development and growth of Indian Economy. As compare to other business loan avail to entrepreneur, mudra loan is less costly, mudra loan is easily available and documentation charge is very less.

### **REFERENCE**

- Agarwala, V., Maity, S., & Sahu, T.N. (2022). Female entrepreneurship, employability and empowerment: impact of the mudra loan scheme. *Journal of Developmental Entrepreneurship*, 27(01), 2250005
- Sahu, T.N. Agarwala, V., & Maity, S. (2021). Effectiveness of microcredit in employment generation and livelihood transformation of tribal women entrepreneurs: evidence from PMMY. *Journal of Small Business & Entrepreneurship*, 1-22.
- Aithal, P.S., & Sharma, K.R.S. (2022). Role of MUDRA in Promoting SMEs/MSE, MSMEs, and Allied Agriculture Sector in the Rural and Urban Area – To Achieve 5 Trillion Economy.
- GunjanBhayana, Rashmi and Prof. Raj Kumar (2020). "Role of Mudra Yojana in Entrepreneurship Development". *Pacific Business Review International*, 13(4) October 2020 [http://www.pbr.co.in/2020-2020 month/October/6.pdf](http://www.pbr.co.in/2020-2020%20month/October/6.pdf).
- Entrepreneurship Theory and Practice, 2008. 32(5): p. 779-790
- Kumar, P., & Nandrajog, D. Empowering Women through Entrepreneurship: The role of Pradhan Manthri Mudra Yojana.
- [www.wikipedia.org](http://www.wikipedia.org)

**A study on employee experience which enable the organization  
to retain the talent**

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**Abstract:**

**Background and Objectives:** - This study helps in identifying the key drivers of employee experience and how employees perceive the company and their role in the organization. It offers guidance to improve the employee experience and retain talent.

**Methods:** The study is conducted with a structured questionnaire. Primary data was collected from Employees through survey. Secondary data also has been used. Factor analysis has been used to identify the key factors of employee experience and talent retention. Second order structural equation modeling was used to examine the hypothesis and SEM has been derived.

**Results:** The study revealed that there is a positive relationship between employee experience and talent retention.

**Conclusions:** -The findings indicated that there is a positive employee experience. The study also reveals that there is no association between monthly income and employee feel that their work in the organization is meaningful.

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**Keywords:** Employee experience, retain talent, Decision making power.

**Introduction**

Businesses now understand that creating an employee experience where employee feel valued at every stage of the process is more sustainable. The journey an employee takes with your company is referred to as the employee experience. It encompasses all of the interactions that take place during the employee life cycle as well as the interactions relating to an employee's role, environment, management, and welfare. By meeting this, businesses hope to enhance the employee experience. Gaining a competitive advantage in the post-pandemic environment requires empowering employees, offering meaningful work opportunities, which focuses on

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employee experience. Employees desire to be respected for their unique strengths and peculiarities. Positive employee experience determines employee engagement, which over time could lead to a "positivity spiral" of engagement, culture, and experience (Maylett and Wride, 2017). EX is the means to achieve employee engagement in a sustainable manner(Gallup, 2018). The work engagement study by William A. Kahn served as a foundation for further research on employee engagement (Kahn, 1990). Employee experience is the continuation of employee engagement, not its replacement (Tucker, 2020). Employee experience puts employees at the centre of the discussion to examine factors of work and management practises that are enabling them to be successful consistently or those that are restricting them to deliver on their promise, whereas employee engagement is a more top-down approach about employers making decisions about policies, processes, practises, and systems that are likely to impact people and their jobs (Morgan, 2017).

We will also understand that how Employee Experience influence Employee Engagement, empowerment, Onboarding process also in Training and Development. This research paper will leverage those who need to implement these concepts into practice.

### **Need and significance of the study**

The last few years have seen unprecedented changes and HR leaders have been at the forefront of handling these. Employees are redefining what's best for their lives and professions as the world changes, demanding more opportunities for learning and growth, diversity and inclusion, meaningful interactions with their managers where their views are heard and improved work-life balance. Talent shortages are severely affecting enterprises in the wake of phenomena like the Great Resignation and quiet quitting. Today's HR executives must implement Employee experience so that employee is engaged and it also reduces the employee attrition.

### **Statement of the Problem**

Leaders focused on keeping companies in survival state while dealing with a range of pandemic issues from the sudden transition to a work-from-home world to hygiene and safety protocols. Today, it's considerably larger. The most recent disruption involves a significant change in how people, businesses and the global economy operate. The largest economic downturn in a century is quickly turning into an enormous rebound. A perfect storm in the competition for talent has been generated by the baby boomers' impending retirement and the low labor force participation rate.

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Employees seek a sense of purpose in their job at the end of the day. The factors that make people happy at work include challenges, senses of accomplishment, and recognition from their employers and coworkers. Employees are more likely to be focused, productive, and involved with the business and their team when they feel like their work has meaning for them. People who enjoy their jobs are also more likely to stick with their organizations and teams over the long term. There is a scope for research which will serve to understand the importance of incorporating Employee experience in an organization.

### **Theoretical Background and Literature Survey**

Ismail S and Dr. Y. Subbarayudu (April 2022) Evolution of the Concept Employee Experience Management: A Detailed Study -

The new multigenerational workplace demands a new way of thinking about human resource management. The people management procedures must be rebuilt. Placing the overall experience of the employee at the forefront might result in a very different strategy. The concept of retaining employee experience as a primary consideration has numerous positive effects on corporate performance. The primary goal of this paper is to examine the idea of employee experience in the present HR setting. The study suggests a design for the employee experience that emphasizes the key components and supporting capabilities. The entire procedure is based on secondary data acquired through practitioner works and survey reports. In addition to improving employee satisfaction and productivity, top management working with the new HR method also engages the multigenerational workforce, creates a competitive edge, and fosters sustainable growth.

Relationship between Job Satisfaction and Employee Experience Kanika Soni, Raghav Chawla and Ruby Sengar (July 2017) - Simply put, job satisfaction refers to an employee's level of satisfaction with their position. Numerous studies on the degree of job satisfaction among employees in a firm have been undertaken for a long time. Other factors like employee commitment, work-life balance, experience, motivation, leadership, and many others have all been connected to job satisfaction. In the study that follows, I've sought to determine how work satisfaction relates to employee experience and how employee experience affects job satisfaction. Data were gathered using a questionnaire, with a sample size of 40. The respondents were employees of different organisations, ranging in age from 25 to 40. It was tested for correlation and regression. The hypothesis was true that there is a relation between job

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satisfaction and employee experience. This would improve employees' job satisfaction, it is crucial for businesses in today's environment to ensure that employees have a positive experience while working for them.

Employee experience: the new employee value proposition, Sivapragasam Pannerselvam, Kavitha Balaraman (October 2022)- Purpose Organizations may better understand talent needs and preferences by understanding what people anticipate in the post-COVID-19 world, which will never be normal. So, the purpose of this article is to outline the elements of an employee experience (EX) that align, empower, and enhance the impact of the business. This paper establishes a case for EX as an emerging idea in employer-employee relationships by drawing on the existing literature review. EX is a result of work, workplace culture, enabling technologies, adaptable human resource policies and procedures, and most significantly, inclusive leadership. Employee engagement is determined by positive EX, which is likely to lead to a "positivity spiral" of engagement, culture, and most significantly, organizational bottom line. The new value proposition is originality/value EX. The five essential components of EX are outlined in this paper, which also presents reasons for continuing EX research as an important area of study within the human resource management (HRM) research tradition.

Employee Experience Framework and its impact on Employee Journey Mapping, Ashutosh Parida (2020) - Purpose: Understanding employee experience and how to create an employee experience framework are the goals of this paper. How an Employee Experience Framework can be used to generate an Employee Journey after being designed. This paper also discusses how Employee Experience affects Employee Engagement, Employee Satisfaction, and the Overall Lifecycle. Review of Literature, extensive interviews with 15 organization personnel. Employees from 22 Functions are chosen at random to represent the population, making up 10% of the sample. Theoretical Implication: How Businesses may utilize Employee Experience Framework to construct Employee Journey Map. Employee Experience is a relatively new term, with very few papers out there that explain what it is and how to map it to our needs. Those that need to put these ideas into practice can benefit from this research paper.

Employee Experience in the Finnish Charter Coach industry – A Case Study (2022)

The objective was to address the root causes of the coach industry's problems and find a way to fill the industry's staffing gap through employee experience. This case study is a group effort. Invitations to participate in the study were sent out by an industry association, and the study

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volunteers were selected through deliberate sampling. The order of responses was used to choose to study six participants (n). 9/2022, data were gathered utilizing semi-structured interviews. Deductive content analysis was used to assess the data, with the theoretical framework of EX and driver shortage serving as a guide. All research-related categories, including strategy and culture, community, physical spaces and environment, technology and tools, activities, and driver shortage, contained elements relevant to EX and the driver shortage, according to the study. The outcome demonstrated that the charter bus sector has a solid EX in the community category. The survey also came to the conclusion that there was opportunity for improvement in every other category. The study has produced recommendations for the industry.

An Experiential Study on Drivers of Employee Experience, Mangesh B Kulkarni, Vandana Mohanty (August 2022) - This study's objective is to perform an empirical inquiry of the factors that affect an employee's experience and how those factors affect that experience in a particular service industry. An explanation of each factor that goes into an improved employee experience framework, as well as the technique utilized to construct it, have been provided. Thus, the hypothesis is created. Data from the proposed framework is statistically analyzed using methods like reliability analysis. Information was gathered from 179 individuals working for various Pune-based IT companies. According to the study's conclusions, employee experience in the IT sector is improved by the notion of empowerment, involvement, and enablement. The study proposed approach for designing employee experience can be applied in other service- or manufacturing-sector firms. Both these pillars could be added in the future depending on the particular requirements of the companies and the shifting environment. According to the requirements of the research, there is also scope to apply this model to a specific target group of employees.

### **Research Gap**

There are independent studies on Employee engagement and employee experience. This study aims in focusing how employee experience is influencing employee engagement and the factors that help in retaining the talent.

### **Objectives**

- 1) To identify the factors which have an impact on employee experience.
- 2) To measure the influence and association of socio-economic and occupational profile on employee experience.

- 3) To ascertain the influence of employee experience in talent retention.

### **Research Methodology**

Both qualitative and quantitative research methods were used to examine and analyze the primary data that was collected through survey.

Secondary data is also used in the research. In the first phase, the literature review yielded the list of factors for each variable. In the second phase both academicians and HR managers were consulted for their expert opinions before deciding on the constructs.

### **Research instrument:**

The survey instrument is a structured questionnaire comprising two parts. Part I relates to demographic and organizational details. Part II is a self-assessment section focused on software and how it is effective for the employee.

The categorical variables are measured based on a five-point Likert-type scale, ranging from “strongly agree”, to “strongly disagree”.

Respondents were being asked to express agreement or disagreement of a five point scale. The data for the purpose of this study was collected through a survey. The data for the study was collected from 80 respondents with the help of a structured questionnaire.

### **Hypothesis**

H0: There is no relationship between employee experience and Talent retention

H1: There is relationship between employee experience and Talent retention

### **Pilot Study**

A pilot study was conducted to check the reliability of the questionnaire in Likert’s five point scale. Cronbach’s Alpha method was used to verify the variance for the items regarding employee experience and talent retention.

The Cronbach Alpha scores are .966 and .815 respectively. These values are above the average values of 0.75 therefore it can be concluded that the statements are reliable.

### **Findings**

The results offer valuable acumens relating to employee experience and employee retention.

**Table 1: Demographic Details**

<b>Personal profile</b>	<b>Respondents Details</b>	<b>Number of Respondents</b>	<b>Percentage of Respondents</b>
Age	Below 21	5	6
	21-35	64	80
	35-50	3	4
	Above 50	8	10
Gender	Female	61	76
	Male	19	24
	Others	0	0
Qualification Background	Undergraduate	28	35
	Postgraduate	47	58
	CA	3	4
	DECE	2	3
Marital status	Married	31	39
	Unmarried	49	62
Monthly income	Less than 20,000	25	31
	20,000-50,000	36	45
	50,000-1,00,000	11	14
	Above 1,00,000	8	10

Age of the respondents:

6% of the respondents stood in the age bracket of Below 21 years followed by 80% of the respondents in the age group of 21 -35years followed by 4% in the age group of 35-50 years and 10% in the group above 50 years of age.

Gender of the respondents:

76% of the respondents are Female and 24% of the respondents are Male and 0% respondents is the other gender. Hence the majority of the respondents belong to female category.

Educational Background:



HSC qualified respondents are of 2%, 0% are Diploma, Undergraduates respondents were 35% and 59% of the respondents were postgraduates, CA qualified respondents are of 4% and DECE is 2%.

Marital status:

40% of the respondents are married and 61% of the respondents are Unmarried.

Monthly Income

31% of the respondents earn less than 20,000, 45% of the respondents earn between 20,000-50,000 as their monthly income, respondents earning around 50,000-1,00,000 are 14% and 10% of the respondents monthly income is above 1,00,000.

**Table 2: Kaiser – Meyer - Olkin and Bartlett's Test**

		Employee experience	Talent retention
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.865	.829
Bartlett's Test of Sphericity	Approx. Chi-Square	1588.634	252.149
	Df	120	21
	Significance	.000	.000

**Source:** *Computed Data*

(Kaiser H F.1970) Meyer – Olkin and Bartlett's Test of Sphericity provides information about the factorability of the data. KMO is a test of the amount of variance within the data that could be explained by factors. The Kaiser – Meyer – Olkin Measure of sampling adequacy value is 0.865, 0.829, as in table II and Bartlett's Test of Sphericity with approximate Chi – Square value is 1588.63 and 252.14 respectively. These values are statistically significant at 5% level. Therefore, it can be concluded that the sample size of the research is adequate for the factors and all the variables considered for the research.

**Employee experience factors**

It is found that 16 variables pertaining to employee experience are reduced into 2 predominant factors with total variance of 74.230. These factors also possess individual variances, 66.729%, 7.501%. The Eigen values above 1 are noticed for the 2 factors. The variable loadings for each factor are measured using Rotated Component Matrix. The Rotated Component matrix shows the

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16 employee experience factors grouped as two major factors. These factors are explained below with the respective variables. The factors are on board experience and employee engagement.

**Table 3. Factor analysis – Positive employee Experience**

F.No	Variable	Factor Loading	Name Given to the Factor
F1	Orientation program	.871	On board experience
	Proper information about first day work	.856	
	Training Prepared to complete job responsibility	.832	
	Raise in Job performance	.815	
	Adequate training	.785	
	Course achieved individual objectives	.783	
	Have access to information	.689	
	Welcomed by colleagues	.651	
	Job description explained during the recruitment	.532	
F2	Work is meaningful	.828	Employee engagement
	Value for experience	.824	
	Recognition for work accomplishments	.817	
	Freedom and Flexibility to do work	.807	
	Manager valuing opinion	.755	
	Supportive work environment	.694	

### Talent Retention factors

It is found that 7 variables pertaining to talent retention are reduced into 2 predominant factors with total variance of 70.027 these factors also possess individual variances, 53.999% and 16.028% The Eigen values above 1 are noticed for the 2 factors. The variable loadings for each factor are measured using Rotated Component Matrix. The Rotated Component matrix shows the 7 employee talent retention factors grouped as two major factors. These factors are explained below with the respective variables. The factors are on workplace culture and work life balance.

**Table 4**

<b>F.No</b>	<b>Variable</b>	<b>Factor Loading</b>	<b>Name Given to the Factor</b>
F1	Office furniture is comfortable	.885	Workplace culture
	Freedom of speech	.856	
	satisfied with the technology provided	.823	
	Promote mental & physical health	.789	
	Shifting to other company for high pay	.776	
	Opportunity to grow	.586	
F2	getting time for personal work	.941	Work life balance

Structural Equation Model for impact of employee experience on talent retention

**Hypotheses testing**

H<sub>1</sub> There is a relationship between employee experience and talent retention SEM. Figure 2 shows the SEM on the basis of standardized regression coefficients. These research hypotheses have been outlined as is sketched below by means of the research conducted on positive employee experience and talent retention of employees working with IT sector. It can be inferred from the figure 2 that coefficients of positive employee experience is 1.27 which signifies that for every increase in employee experience the employee intent to stay or continue with the organization gets enhanced. Thus an employee with positive experience will deliver a positive experience to his clients and thus enhances business prospects.

**Table 5 Conceptual model fit**

<b>Measure</b>	<b>Threshold</b>
Chi-square/df (CMIN/DF)	.747
P-value for the model	.121
Goodness-of-Fit Statistic (GFI)	.937
Adjusted Goodness-of-Fit Statistic (AGFI)	.919
Comparative Fit Index (CFI)	.962
Normed-Fit Index (NFI)	.915
Tucker-Lewis index (TLI)	.941
Incremental Fit Index (IFI)	.902
Root Mean Square Residual (RMR)	.058
Root Mean Square Error of Approximation (RMSEA)	.048

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The research hypotheses have been established on the basis of the model fit which is drawn above. Table 5 shows the model fit summary of the research. It is understood that the p value is significant at 1%.

H<sub>1</sub>: Positive employee experience is positively related to performance outcome is accepted. The study clearly lays emphasis that employee experience has a positive relationship with talent retention, thus the hypothesis is accepted.

**Table 6: Structural Equation Model for Testing the Framework**

Latent Variable	Measured Variable	Standardized	Un Standardized
employee experience	Employee on boarding	.94	1.80
employee experience	Employee engagement	.85	1.00
Talent Retention	Workplace culture	.73	1.00
Talent Retention	WLB	.05	.02

The table 6 summarizes that the un-standardized regression coefficient of positive employee experience is 1.27 which signified the effect on talent retention. The results divulge that talent retention will upsurge by 1.27 for every increase in positive employee experience at 1% level of significance.

The un-standardized regression coefficient of Employee on boarding is 1.80 which signifies the effect over positive employee experience. Moreover, the regression coefficient of employee engagement and workplace culture is 1.09 which signifies the augmented effect in creating a positive employee experience.

The study throws light that IT companies need to make a wise investment in their employees by providing a level of personalized support and assurance to their teams which will have a constructive effect on the rest of the employees.

Thus it is imperative that IT companies ensure that they create a great atmosphere for their employees to ensure talent retention. The un-standardized coefficient is 1.00 which indicates that employees have work life balance.

### ONE WAY ANOVA

Result of one-way ANOVA on decision making power and age

- To analyze the Employee experience in decision making power in the organization.

**Null Hypothesis:** There is no significant relationship between the decision making power and age.

**Alternative Hypothesis:** There is a significant relationship between the decision making power and age.

Table 7: ANOVA

Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.916	3	3.305	4.328	<b>.007</b>
Within Groups	58.034	76	.764		
Total	67.950	79			

In the above table 7,  $\chi^2$  is 0.007 which is less than 0.05, the null hypothesis is rejected. This signifies that the employee have the freedom to make their own decision which is impacting their work is significantly associated with age.

### Result one-way ANOVA for work is meaningful and Monthly income

- To analyze the Employee experience like working in organization is meaningful.

**Null Hypothesis:** There is no significant relationship between work is meaningful and monthly income.

**Alternative Hypothesis:** There is a significant relationship between work is meaningful and monthly income.

Table 8: ANOVA

Monthly income

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.734	3	2.578	2.935	<b>.039</b>
Within Groups	66.754	76	.878		
Total	74.487	79			

In the above table 8,  $\chi^2$  is 0.039 which is greater than 0.05, the null hypothesis is accepted. This signifies that working for the organization is meaningful is not significantly associated with monthly income.

### **Findings and Conclusions:**

There were just 80 participants in this study. While employee experience focuses on how an employee feels about his job and organization, most firms have not yet made it a top priority because they are more focused on one component of HR. According to the report, the majority of IT organizations prioritize employee engagement, workplace culture, and onboarding. From the study it clear that employees are satisfied with their current pay and also employees feel that when they have positive work culture it make them feel motivated and inspired to work.

So, it is crucial for businesses in the modern world to ensure that employees have a positive experience while working for them because this will have an impact on employee engagement and improve the working environment. It is becoming more and more crucial for businesses to make sure that their talented employees stay with the company. For this, it's important to keep the employees happy and empowered.

### **Suggestions**

The study highlights that organization focus on employee experience.

- Improving work-life balance can potentially improve employee overall well-being, including their physical, emotional, and mental health.

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- Employees think that flexible working arrangements boost workplace morale, which may help with work-life balance. They also think that their employers can support them in striking a balance between their job and personal responsibilities.
- Considering the ideas and opinions of employees in decision will help in promoting organization growth. Delegation of authority to employees at various levels and participation of employees in offering suggestions helps in improving the employee's value.
- Employee value should constantly be emphasized by leaders. Employees will only have a positive and strong relationship with their supervisor if they feel this way about it. Leaders must be clear about their expectations for employees and offer constructive feedback regarding how they are performing within the organization overall.
- Meaningfulness is believed to satiate psychological needs for belonging and purpose, which further encourages engagement at work. Also, those who describe their jobs as meaningful are driven to engage more actively because they believe that by doing so, they will be better able to safeguard and improve their well-being.
- Employees' overall well-being, including their physical, emotional, and mental health, may be enhanced through better work-life balance.

### **Managerial implication:-**

People are the human resources that constitute every business. Without human resources, a company cannot exist. Everyone agrees that a key element in keeping businesses competitive in today's market is the quality of its human resources. Offering employees the opportunity to advance in their careers and giving them some insight into how their careers are progressing will make them happy and also help to keep highly trained workers on staff. These are some of the methods being taken to improve the employee experience.

Although the future of work is uncertain, one thing is certain: Successful businesses depend on their employees. You can provide a better customer experience and compete in the new workplace by putting your people at the centre of the business. Happy employees are the result of a positive employee experience. It contributes to a stronger organisational culture and enhanced business performance. In order to boost productivity at work, it is crucial to invest in

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the happiness of employees through fulfilling employee experiences. Enhancing the employee experience has the potential to positively influence the organisational culture.

Improved business profits can result from engaged workers. Employee experience and engagement go hand in hand, it is important to work on employee experience. In addition to increasing employee engagement and happiness, it also results in improved earnings. Ask the employees for feedback constantly.

It gives leaders insightful information about the workplace and culture and empowers workers to build a conducive work environment. When the employees are happy and satisfied they are loyal to the loyal organization.

Many interactions occur between your employees and their leaders, supervisors, co-workers, technology, and workspace. Also, each interaction adds to the overall employee experience. Employees who feel valued, feel comfortable and empowered contribute positively to interactions, productivity, and business culture. And these elements affect a company's bottom line. Start working on transforming the employee experience if you want a thriving workforce, happy customers, and a prosperous company.



## **Challenges and Opportunities of Block chain Technology in India**

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### **Abstract:**

A new disruptive force of digital technology is changing the business models and increasingly becoming a crucial factor around the world. The promotion and adaptation of digital technology by the government of India for implementation of its public policies and schemes that aim at economic reforms are unique in terms of considering the prioritized need for making the services available at ease through digitalization. The banking, insurance, corporate, and other financial and non –financial service sector institutions in India are also undergoing massive digital transformation.

In this phase of transformation through digitalization the application of Block chain Technology is the most innovative one which is being considered as global force of disruption. The Block chain Technology is gaining attention of even smallest size of producer in India too. The elegance of the Block chain is that it obviates the need for a central authority to verify trust and the transfer of value. It transfers power and control from large entities to the many, enabling safe, fast, cheaper transactions in a completely transparent manner. Since, the Block chain Technology is being seen as an infrastructural need of Indian industries to compete in the global market, hence it becomes imperative that its relevant perspectives, regulation, and result aspects are discussed and shared for advancement of subjective as well as practical know-how.

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**Key words:** *Block chain, Crypto currencies*

### **Introduction:**

Information is the base to run business smoothly. How faster and accurate information is possible to receive is better for business development. Block chain is one which is ideal for delivering immediate, completely transparent and shared information helpful for business. The information stored on an adequate ledger can be accessed by permission network members. It can track payments, accounts, production, orders etc. end to end transactions details can be observed by block chain, it gives greater confidence and as well as new efficiencies and opportunities. Block chain not require any third party authentication. It is open, decentralized which maintains records, transactions between the parties.

Changing technology is the future with the changing time; society will witness an extraordinary increase in the use of various types of technologies in our day today life. Technologies like machine learning, robotics, artificial intelligence etc. are popular technologies used in various sectors. In the year 2009 Satoshi Nakamoto introduced new technology i.e. Block chain to serve the public ledger for Bitcoin network, it has now popular all over the world and all across all sectors.

Block chain is an emerging technology, potential to transform multiple industries and make more democratic, efficient, secure and transparent. It is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value. The information in it is open to anyone everyone can see it. Block chain is transparent in nature and one who is involved in this is accountable for his actions.

The main objectives of the study are to study the block chain technology application and practices, and to assess the opportunities and challenges of block chain technology in India. The study is in descriptive in nature. The secondary data collected from books, magazines, journals and web sources.

### **Statement of the Problem**

Safeguarding data is one of the critical challenges for government, entrepreneurs, executives and other entities in India and across the world. Business and government authorities globally are seeking ways that could ensure their information cent percent hack proof. Block chain technology is something which everyone is looking up to. Hence the present study

circulates around one of the novel technology of securing data “block chain technology” to understand its effectiveness in shielding the data from being hacked by the hackers. The study also focuses on emergence of block chain technology, its application, opportunities and challenges in India. The type of research is descriptive in nature. The study is based on secondary data collection.

### **Application and Practices of Block chain:**

A block chain is a digital ledger of transactions which is copied and distributed across the network of computer systems. After every transaction block generated for various information and gets itself updated in every participant’s ledger. Once written in ledger cannot be changed. Every participant in this block chain of transactions is a very important part of the network. It is transparent in nature, every person can add new records to this database but cannot change any record existing records. Examples of the application and practices of block chain are Financial services, Land records, Supply chain management, Identity Management, Benefit distribution, Educational certificates, Cross border finance, Medical records, Building and deploying smart contracts, Voting and Governance, Entertainment industry, Food supply chain etc., some of the other block chains are explained below:

- **Crypto currencies:** A crypto currency is a digital currency, basically designed to be used as a medium of exchange wherein each coin ownership record is stored in a decentralized ledger. Crypto currencies use ‘decentralized control’, which suggests that they are not controlled by one person or government. When Bitcoin launched in 2008, it allowed people to directly transact with each other without having to trust third parties like banks. Since then 4000 different crypto currencies have been created. Some examples are Bitcoin, Ethereum, Dogecoin, Fantom, etc. The block chain is the technology behind cryptos where all the exchange or transaction information is stored which cannot be hacked or changed and a copy of the ledger is distributed among all the participants of the network. It records every single transaction. Each and every person can buy/sell or deal in cryptos and be a part of the network. Nowadays, several financial applications provide a user with the luxury of doing so.
- **Cars:** Cars were running on odometer, where the fraud take place, to avoid this fraud to avoid this the government tries to encounter by collecting the mileage of cars when they get a

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safety inspection, but that's not enough. So, instead, we could replace regular odometers with smart ones that are connected to the internet and frequently write the car's mileage to the block chain. This would create a secure and digital certificate for every car. And because we use a block chain, nobody can tamper with the data/information, and everyone can look up a vehicle's history to ensure its correct. In fact, this has already been developed used by Bosch's IoT lab and they are currently testing it on a fleet of 100 cars in Germany and Switzerland.

- **Legal Documents:** block chains can keep track of things like intellectual property or patents or it can even function as a notary. A notary is someone (for example the Central Government) who can confirm and verify signatures on legal documents. But we can just as well use block chain for it. The online website stampd.io as an example, allows you to feature the documents to the Bitcoin or Ethereum Block chain. Once, a document has been added you can always prove that you simply created a document at a particular point of time very similar to a notary, although right now block chains are not on the same level as notaries in a legal perspective.
- **Food and Medical Industry:** From the moment they are harvested or made, they can track their food products with the help of block chain technology, when they end up in the hands of the customers. For each package of food, Block chains could help us to create a digital certificate, proving where it came from and where it has been. So, if contamination has been detected i.e. the manufacturer wants to revert a batch of food because of certain quality issues, we can trace it back to its root and instantly notify other people who bought the same batch of bad food. Walmart and IBM are the two big giants currently working on such a system. A system like this could be applied to other similar industries as well. We could use it to track medicines, and other regular products and battle counterfeit goods by allowing anyone i.e the officials in general to verify whether or not the product comes from the original and authentic manufacturer.
- **Logistics and Supply-chain:** By using block chain one can track packages and shipments. That is something that IBM and container shipping giant Maersk Line are working on a decentralized ledger to help with making the global trade of goods more efficient. Block chain is still in the development phase and companies are trying to come up with such a system to track their package pinpoint.

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- **Smart Contracts:** Block chains are useful to keep track of information and verify integrity and also it is useful for smart contracts. When various conditions are met block chain can perform actions. These contracts show and work on their live performance.
- **Original Content Creation and Royalties tracking:** People can have smart contracts for their content and have proof that they were the creators and not others. Media chain is one of the companies working in the music industry using block chain and smart contracts.

In so many different ways block chain can be used. Following is just a brief highlight of other applications:

- **Real Estate:** Propy a California-based company and many other countries are using block chain as a title registry system for property ownership with distributed and decentralized systems.
- **IoT Devices:** Filament, a Nevada-based company, creates IoT microchip hardware and software that lets the connected devices run on block chain technology. The product's encrypted and secured ledger data distribute information to other block chain-connected devices and allow monetization of machines based on the usage of time stamps and others.

A cyber security company, HYPR, is using this technology to secure IoT devices with a decentralized credential system. By taking passwords away from a centralized system to make devices even more secure and unshakable

- **Documents:** To store their data and people's data, many countries are adopting block chain technology by this way they are bringing transparency and security to the documents like social security numbers, birth certificates and voter registration cards, etc.
- **Non-Fungible Tokens (NFTs):** These are the new trend in the world after crypto-currencies survive upon block chain technology. The year 2020-2021 gave rise to digital items at par. NFTs are also digital items that include photos, GIFs, arts, videos and other media that are sold over block chain such that the owner of the media created can claim his/her full rights.
- **Big Data:** All the computers in the network are practicing to verify the information stored in it, Bock chain helps to store big data with security.

Making block chain an excellent tool for storing data with its immutable nature.

### Opportunities for Block chain in India

- Block chain covered the whole global, it helps to develop business with create ideas and skill. It is witnessed as Global centre for block chain innovation
- After post demonetization, India has showed a progressive outlook towards digitalization, and also it is aware of benefits of block chain technology.
- The Indian government's block chain initiatives are coming into action and are the platform of many proofs-of-concept (POC) demonstrated in the areas of registry, insurance and banking.
- Block chain gives the opportunities for green pasture for engineers.
- A number of Indian states are looking into using the block chain technology aggressively for security and digital land records
- Block chain gives rise to technology based businesses. It promotes entrepreneurship and helps to develop technical hub.
- Back in 2018, RBI set up a unit of individuals to research and supervises new technologies around the block chain development. The focus of this research was to specifically investigate creating a cashless and decentralized banking system.
- Maximum businesses and corporate sectors adopt block chain to secure their transactions and to develop their business which will contributes to the Indian economy.

### Challenges for Block chain Adoption in India

The future of block chain appears to be encouraging, at the same time, the fact that there are many unanswered questions that make block chain highly vulnerable simply cannot be ignored. Some of the challenges in the way of successful adoption of Block chain are:-

- Since block chain is still in its initial stage or introduction stage, it's too early to predict it's applicability as a mainstream technology.
- Lack of regulation and compliance are the most prominent challenge standing in the way of successful adoption of the Block chain.
- There are still millions of people who are not aware of the concept of internet and digitization, and under such circumstances, making block chain a part of mainstream life is a daunting task.
- Other challenges faced by block chain technology are Integration of existing system, Brain drain, Costly affair, Regulatory uncertainty, Lack of trust/trust gap, Inability to bring

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Networks together, Standardization, Chaos among executives, Identification of cost center, Stable economy, Spreading awareness etc.,

### Findings

- India is still in nascent stage
- Availability of trusted vendors is a challenge
- Bringing Block chain technology under regulation is not an easy task
- Controlling Brain drain is a daunting task
- Block chain technology ensures enhanced security and transparency
- Dearth of motivation for Stratus
- Block chain is very transparent to everyone and security is the most important priority.
- Block chain is developing in every field from retail to healthcare.
- There is a possibility of money laundering

### Suggestions

- Provide impetus for start-ups
- Retain Talent, create interest of leaning new technologies,
- Frame policies to bring Block chain technology under regulation
- Create more awareness about Block chain benefits and opportunities among the public and business sectors.

### CONCLUSION

The Block chain technology made its official appearance almost over a decade ago, in the year 2009. Since then, the world has seen a significant transformation in this remarkable technology. From the retail sector to the field of healthcare, Block chain technology has made its way into several industry verticals, thus making Block chain trends the most searched keyword. The future has a lot of scope for Block chain solutions.

There is a series of road block that are still blocking the road to the development of block chain in India. People would need enough time to embrace BCT, develop trust and use this platform for several applications.

If Block chain technology is adopted with due diligence, will positively contribute to the Indian economy and no doubt India will become one of the world's block chain leaders.

### References:

- <https://www.blockchain.com/>
- ShailakJani, The Emergence of Block chain Technology & its Adoption in India, “The Emergence of Block chain Technology & its Adoption in India”, July 2019.
- <http://blockchain.mit.edu/>
- <https://en.wikipedia.org/wiki/Blockchain>
- Bashir, Imran (2017). *Mastering Block chain*. Packt Publishing, Ltd. ISBN 978-1-78712-544-5. OCLC 967373845.



## **IMPACT OF DIGITALIZATION AND CASHLESS ECONOMY**

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### **ABSTRACT:**

This paper studied the views of people on introduction of cashless economy in India .The study was conducted in Delhi region & data was collected with the help of structured questionnaire and analyzed using simple percentage method.

Responses from respondents shows that cashless economy will help in curbing black money, counterfeit's fake currency, fighting against terrorism, reduce cash related robbery, helps in improving economic growth of our country.

Major challenges that can hinder the implementation of the policy are cyber fraud, High illiteracy rate, attitude of people, lack of transparency & efficiency in digital payment system. The study shows that the introduction of cashless economy in India can be seen as a step in right direction. It helps in growth and development of economy in India.

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**Keywords:** cashless economy, corruption, Black money, India, Digital Payments.

### **INTRODUCTION:**

The government has implemented a major change in economic environment by demonetizing the high value currency notes of ₹ Rs 500 and Rs 1000 from 8th November 2016 and push India towards cashless future. What is cashless economy: A cashless economy is one in which all the transactions are done through electronic channels such as debit/credit cards, Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS). The circulation of physical currency is minimum. The Indian economy continues to be driven by the use of cashless than 5% of all payments happen electronically. Electronic based transaction seeks to drive the development and modernization of India's payment system. The essence of the policy is to shift the economy from a cash based economy to a cashless one. Efficient and modern payment system is a key enabler for driving growth and development.

The policy also aims at improving the effectiveness of monetary policy, managing inflation in the economy, maintaining stable pricing system. In India, the ratio of cash to gross domestic product is 12.42 %in GDP; this is one of the highest in the world. It was 9.47% in China or 4 % in Brazil. Further, the number of currency notes in circulation is also far higher than in other large economies, India had 76.47 billion currency notes in circulation in 2012-13 compared with 34.5 billion in US.

The government is working at various levels to reduce the dependence on cash.PM-Narendra Modi unveiled two schemes ॐLucky GrahakYojna, Digi DhanVyapaarYojna for customers and traders like to promote mobile banking and e-payments. To encourage and strengthen cashless economy its important to inculcate the habit of making e-payments. Government encourages cashless transactions like mobile banking, Ru-pay cards, UPI, USSD these are means and methods of digital payments. Less cash economy is in the interest of everyone and it will help in creating a clearer economy in future.

Government have also introduced Aadhar based payment system, this is for those people who don't have cards or mobile phone. Reducing Indian economy's dependence on cash is desirable for a variety of reasons. To control counterfeit notes that could be contributing to terrorism, it also affect the monetary policy of our country and to eliminate the "black money, hawala transfers can't be made without paper currency, Curbs illegal activities altogether. A large part of

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black money is generated in illegal trades like selling drugs therefore without cash or less cash illegal trade might become difficult.

RBI has also issued licenses to open new-age small finance banks and payments banks which are expected to give a push to financial inclusion and bring innovative banking solutions. Things are also falling in place in terms of technology for India. The recently launched Unified Payments Interface by National Payments Corporation of India makes digital transactions simple. Even the RBI has also recently unveiled a document, **“Payments and Settlement Systems in India: Vision 2018”**, setting out a plan to encourage electronic payments and to enable India to move towards a cashless society or economy in the medium and long term.

Demonetization in Indian Economy Sector first economy can be bifurcated in three board segments Agriculture sector, manufacturing sector and Service sector all these three sectors contributed in Indian GDP.

- Agriculture Sector Contribute 17% in GDP
- Manufacturing Sector contribute 30% in GDP
- Service Sector Contribute 53% in GDP.

### **REVIEW OF LITERATURE:**

#### **According to RBI:**

The total circulation as on Oct 28, 2016 was INR 17.54 lakh crores, 86% of this component is in currency notes of INR 500 and INR 1000 denominations therefore the currency that is being estimated that around 20% of this currency is in black. We believe that this money either will not come back into the system for exchange for new notes or will be surrendered as black money and taxes thereon will be paid.

#### **According to a World Bank estimate:**

In 2007, around 20-25% of India's GDP is the size of the parallel black economy. The steps taken by Indian government has led to a scare in the parallel black economy and should lead to better tax compliance going ahead. This will have a telling effect on the other heavens of black money i.e. real estate and gold. Both these sectors are going to witness reduced demand. Lower demand gold resulting ultimately in lower import of gold is expected to improve the current

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account balances. The Indian rupee should remain stable and display appreciating bias against hard currencies, as the current account improves and may also move into surplus.

The sudden change due to reduced cash transactions will lead to reduction in economic activity. We believe that the services sector growth will be majorly affected. This will lead to lowering in Inflation expectation and moderation of headline inflation too. However, the effect on inflation would depend on the moderation in economic activity in those sectors that have heavy cash transactions. They are some positives expected over the medium to long term. A more compliant economy should increase tax collections and tax to GDP ratio should improve from both direct and indirect tax.

### **Arpan Nainga: Head of the Indian desk for HSBC's commercial banking division:**

I personally think it's a chicken egg situation because the more prepared you are, the more people who are aware, the more opportunity you're giving to people to find loopholes in the system. "Whereas the downside of making it a surprise was that the government and the central bank were severely unprepared to manage the whole situation.

### **Monishankar Prasad: New Delhi based author and editor for Alchona an Australian current event publication**

The unbanked and informal economy is hard it, the poor do not have the access to structural and cultural resources to adapt to shock determine economics. The poor were taken totally off guard and the banking infrastructure in the hinterland is rather limited. The tech class has poor exposure to critical social theory in order to understand the impact on the ground. There is an empathy deficit.

### **STATEMENT OF THE PROBLEM:**

The idea of digitalization and cashless economy is good, but it has to be taken into consideration that most of the black money is kept in the form of land, buildings, or gold or kept abroad, the liquidity squeeze caused by demonetization will be negative across sectors with high level of cash transactions. Real estate, jewellery, retailing, restaurants, logistics, consumer durable and luxury brands, cements, and some segments in retail/ SMEs lending space will be facing short term instability.

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The MOVE will give birth to an extra added cost which can be said as the replacement cost. We cannot ignore the increased cost of operating ATMs as now they need to be refilled more often and also it will be a huge burden on banks.

### **OBJECTIVES OF THE STUDY:**

- Studying the concept of cashless economy.
- To identify the prospects and challenges of cashless transaction system in India. □
- Studying the current position of cashless India.
- To study the opportunities and advantages if India become a cashless economy.

### **METHODOLOGY:**

Type of data: The present study is quantitative in nature and secondary data will be used for the purpose of analysis.

### **IMPACT OF DIGITILIZATION AND CASHLESS ON DIFFERENT SECTORS OF ECONOMY:**

- ✓ Agriculture: This sector is more associated with cash transactions and therefore through demonetization farmers face a temporary shortage of cash in hand, this would lead to a delay in payment which in turn would hurt the related companies in short term.
- ✓ GDP: According to the present estimate, the growth in manufacturing, mining sectors and also construction activity is facing a big problem. The estimate is in line with Central Bank, Reserve Bank of India that has forecasted GDP growth to be at 7.1.
- ✓ Most of the retailers report that 40 to 60% drop in sales after demonetization but from December this drop has slightly decreased, but this change has an impact in 2017 for few months.
- ✓ Fast moving consumer goods is also affected by demonetization because most of the small traders does daily transactions only in cash since they has very less cash in their pockets, the daily sales of these traders drop down by 20 to 30%.

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- ✓ Some experts believe, in the short run, demonetizing Rs.500 and Rs.1,000 currency notes may have adverse impact on India's economic growth. It may drop country's GDP growth by one percentage point in 2016-17. Rural India will be affected most due to demonetization move.
- ✓ The rising inflation in the country will come down and people will get huge relief from it. This will lead to restrict and reduce inflation in the medium term in the country's economy.
- ✓ Overall, the demonetization move by Modi Government will have a very positive impact on the economy. In the past, the country has seen several demonetization move-1,000, 5,000, and 10,000 rupee notes were demonetized in 1978 and all 1,000 and 10,000 rupee notes were recalled in 1946.
- ✓ Recently, responding to a question at a press conference, our Finance minister Mr. Arun Jaitley ruled out any short-term negative impact of recent demonetization move on country's growth.

### **ANALYSIS AND FINDINGS:**

- It has positive impacts mainly related to increase in Sales i.e., via digital transactions which has boosted up many business transaction
- Usage of E-wallets has been predominantly increased which resulted in increase in sales by 140% in SBI and online marketing organizations like flipkart etc.
- Farmers are not educated and aware about how to work on e-payment system, 78% of the population do not use internet in which almost 80 to 85% are farmers.
- In most of the villages proper banking system is not developed and people are not aware of banking services provided due to lack of knowledge.
- Demonetization has impacted its effect on unorganized sector such as wages payment to workers and commission to agents etc.
- It smashed the real estate market and it has resulted in 50% drop down.

### **CONCLUSION:**

India is gradually transitioning from an economy based on cash to cashless economy. Now, there is an immense need for India to move towards a cashless economy to save huge money which is being spent on the printing and maintenance of currency.

It may assist the Indian government not only to achieve the objective of inclusive growth but also to make public utilities more effective. Cashless economy is based on digital transactions which are easily traceable and taxable and does not leave any room for circulation of black money.

The cashless transaction system is reaching its growth day by day because it is not only safer than cash transaction but also it is less time consuming and avoid the trouble of carrying and trouble of wear and tear like paper notes.

Although it is difficult to implement the idea of cashless 48 Emerging Trends and Innovations in Modern Management Indian economy due to misery and poverty of a large no of Indians yet there is a sea change in the mindset of Indian people with regards to digital means of monetary dealing due to being easy, convenient, transparent and safe. Now we may say that India must go for less cash economy instead of cashless economy because a continuous march towards less cash economy will certainly lead to India towards cashless economy.

### **BIBLIOGRAPHY:**

- Bansal, Assistant Professor, School of Commerce and Management, Jan 2017 [www.forbes.com](http://www.forbes.com).
- [www.invesco mutual fund.com](http://www.invesco mutual fund.com).
- Dec 2016, New Delhi, [www.dnaindia.com](http://www.dnaindia.com)
- Sinha, Sanjeev, Dec 2016, demonetization impact, New Delhi.
- David Ashworth, Nov 22, 2016 impact on India's Inflation.
- Demonetization at what cost and borne by whom-Jitendra Singh.

**An overview of Fin-tech technologies with respect to  
Banking Sector**

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**Abstract:**

Indian banking recovered over the next two decades as Indian economic growth accelerated. Banks are affected by economic and digital transformation, financial innovation, and development of internet. The rise in the competition in financial sector made a way for incorporating various new technologies to meet the demands of customers.

The technology which is hitting in the financial services is Digitalization, Mobile banking, Block chain technology, UPI, Wearables, Cloud computing, Biometrics, Augmented reality by this new transformation of technology helps Indian banks to diversify the services through various products and services.

Hence the objective of this paper is to analyze the innovative technologies in Indian banking sector which is supported by fin-tech companies. The study is based on secondary data.

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**Key words:** Indian Banking, Digital transformation, Competition, Economic growth



### **INTRODUCTION:**

The financial institution or Banking industry plays a vital role in an economy. The development of the banking sector will impact the growth of the country in a positive way. The "Digital India" concept made every financial sector in India undergo a huge evolution.

The change in the working of the banking sector resulted in the high customer expectation to meet this demand banks now operating on the element of advanced technology. The increase in the new technology transformed the Indian banking sector. Now every bank provides their banking services with various service patterns in collaboration with advanced technology than the conventional system of handling money.

### **Review of literature:**

1. Deepa Chauhan (2021), titled "Role of innovation on the performance of Indian banking sector" analysed the role of innovation on the performance of Indian banking sector of both private, and public sectors which adopted the technology in all their banking business achieved the objective of customers satisfaction but it is understood that private banks lead the role first when compare to public sector banks.
2. Smt. V Vimala (2015), titled "The Impact of Information Technology Adoption on the Customers of Bank of India, Bangalore Urban – An Evaluative Study", in this study it speaks about the significance of information technology adoption and its impact on customers with the various variable which indicate a positive impact on both customers and also on bankers, but still it is suggested to look after the area like security system, implementation of new IT policies and regulations, to provide better services to customers with new technology.
3. Nguyen Thi Kim lien, Thu-Trang thi Doan, Toan Ngoc BUI (2020), titled "Fintech and Banking: Evidence from Vietnam" stated that the fintech services banks to encash the better advantages of technology and services to bank customers. This study is also used the research model based on that the research is conducted the model consists of this criteria's perceived usefulness, social influence, trust, and perceived ease of use.
4. Francesca Arnaboldi and Bruno Rossignoli (2015), titled "Financial Innovation in Banking" put a light on the working of innovation in banking, it is found that with the use of technology the

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banks can go for a cost reduction and also said that the innovation is trial and error basis since the development of technology will always be attached with innovations.

5. GencayTepe, UmutBurakGeyikci, Fatih Mehmet Sancak, (2021), titled "Fin-Tech Companies: A Bibliometric Analysis" fintech study examines financial services, financial access, and financial technology, where Fin-Tech is at the centre. It also focuses on crypto currency, bitcoin, and smart contracts where the block chain is at the centre. The results reveal a systematic map of existing studies. Further, the study plays a guiding role in future research.

### **The Rise of fin-tech companies in the banking industry:**

Fin-tech stands for financial technology which is going to work on the innovation used for providing advanced financial services. In this modern era now very, business is working in the digital mode and this shows the increased number of transactions also. Hence to have an interactive business fin-tech firms are established to provide new technologies.

Fin-tech companies found that there is a need for some change in the working of the banking industry starting from money deposits to till the dispatch of money into various streamlines hence the research is made on the new technologies. By incorporating fin-tech it is expected to improve efficiency and lower the cost which is involved in banking services which helps both customers and services providers.

It encourages the practice of digital technology which is a key for the new business to invent products and services of banking that can easily be read by customers and retail banking firms. Further can collaborate with the banking system to hurtling the process and achieve the targets.

The upcoming banking sectors break the boundary of working with traditional methods. Fin-tech contributed to emerging banking sector trends through various banking applications further, it is looking forward to creating a cashless society. In the last few years, it shows that the rapid increase in fin-tech has transformed the pattern of performing transactions, further it is focusing on a cashless society.

### **Top fin-tech companies:**

In India there are more than 53,000 fin-tech firms are there whereas in the united states it is 1,20,000.

Following are the top fin-tech companies in India:

- Paytm
- PhonePe
- MobiKwik
- PayU
- ETMoney
- Policybazaar
- Lendingkart
- Freecharge
- Mswipe
- Ezetap

### **Objectives of the study:**

1. It aims at understanding the working of financial technologies (Fin-tech)
2. To know the stages wise transformation of Banks with technologies.
3. To know the banking services which is contributing to the demand of customers with innovative technologies

### **Methodology:**

Every research undergoes with the collection of data with two methodologies, here the data which is collected from secondary source based on the collected data the analysis is made.

### **Data Analyses:**

#### **Future of the banking sector:**

Indian banking changing the scenario of its working by incorporating technology, here are a few trends in banking:

#### **1. Digitalization**

At the beginning of 1980 banking sector started to incorporate information technology in their daily business activities to perform the functions like recording and maintaining books of accounts.

The new technology called core banking solution pulled out the customer experience through the transformation began during the period 1990 i.e., liberalization when the Indian economy has taken active participation in the development of the economy. Both private and international banks made the way for their business in Indian due to which the Indian banks can switch to new technology. The present banking sectors are advanced in all ways by considering the technology and moving from traditional banking to modern banking

Indian modern banking system found its way in providing simple, easy, paperless, contactless services to its customer's features like immediate payment service, real-time gross settlement, national electronic funds transfer, tele banking, and online banking. Digitalization provides customers the flexibility of "anywhere and anytime banking", with customer satisfaction simultaneously banks also decrease the cost of the transaction, and human error and increased the business profit.

The growth of technology helps tech-savvy customers with innovative solutions. Besides the financial institutions, insurance, healthcare, retail, trade, and commerce are the major industries that are experiencing the massive digital shift. To stay competitive, it is necessary for the banking and financial industry to take the opportunity of the digital trend.

### **2. Mobile Banking:**

ICICI bank was the first bank in India to launch mobile banking in the year 2008. This is another type of banking technology which is taken place next after digitalization. The foremost trend in the banking sector i.e., mobile banking, provides the service of various banking activities like the inquiry of account balance, account transfer, and bill payments through Smartphone by banking customers from its bankers.

At present, it is coming up with innovations like the internet of things, and voice-enabled services. These voice-enabled services can be found in every smart television, smart car, and smart home. Industrial leaders are collaborating to adopt the internet of things which is connected to networks for creating a mobile banking technology that require users' voice to operate based on the query it received will transmit and take the process of completion

### **3. Unified Payment Interface**

This technology has drastically changed the method of payment system in every business activity. It also enables instant real-time banking services to the customers through the banks. In India, this payment banking service is hitting the market from this technology the customers can settle their payments for the purchase they made. The national payment corporation of India developed this solution and is controlled by the reserve bank of India. In the year 2016, this application was launched which is secured in nature to transact with money.

This service provides users to easily transfer funds that are available anytime any day, unlike other internet banking systems. Currently, there are approximately 39 applications and more than 50 banks working with this system. In India, the effect of demonetization played a significant role. In the future, with the help of UPI, banking is expected to become more "open."

### **4. Block chain:**

In 1991 concept of block chain was first introduced to mitigate the risk which is involved in recording the information of customers. It is an open distributed ledger that records the entire transaction of each customer in a secured manner which is shared among the bundle of technology that helps to create blocks, develop, authenticate and record transactions without any modification. This technology in the banking industry made it difficult for hackers to extract the confidential reports of the customers. Block chain technology works on the principles of computer science. The introduction of block chain technology made the way for Indian banks to work with efficiency, cost, speed, and security prospect. The future of block chain is connected with crypto currency which is now in a trend called bitcoin, this widespread application is in use since the year 2009.

Features of the block chain technology:

- A. Decentralize the actives of banking.
- B. Faster settlement
- C. Increased capacity
- D. Better security
- E. Transparency

### 5. Artificial Intelligence Robots:

In India, all banks have started to adopt artificial intelligence robots or chatbots for customer care service. It not only limits retail banking services but also focuses on investment banking and all other financial services. This technology is at a stage of promising the evolution of the Indian banking sector by adopting this technology the banks can reduce human error which improves customer solutions. Intelligence also identifies frauds and gathers information that is needed for surveys and feedback for undertaking financial decisions.

Usage of artificial intelligence in banking:

- A. Decrease in operational expenses
- B. High-quality customer experience
- C. Identify fraud and supervise compliance
- D. Helps in decision-making with respect to loan and credit
- E. Automation of investment process
- F. Helps in managing risk

### 6. Cloud Computing:

This technology started to break down the operational barriers which are their in-banking industry. Its flexibility, scalability, and efficiency made every bank adopt this application to fasten the service. Further, banks can easily invest in hardware and software and update the information on cloud models.

We also have various types of clouds like public cloud, private cloud, hybrid cloud, and community cloud which is used for a different purpose by different users.

### 7. Biometrics:

The advanced method of securing one's information is a biometric authentication system which is implemented in all sectors especially banking. This technology helps the banks in the smooth functioning of their business. The concept of biometrics consists of one-time passwords which are sent to the user as identity once the proper password is injected the transaction takes place and users can satisfy this functioning without any drawbacks hence, it is a highly secured system of database which protect the interest of customers.

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Fintech companies have found this technology to strongly protect the trust of customers who deal with banking services attached to technology, if it fails so, technology will drop its applicability in these areas. This system helps both banks as well as customers all the way starting from confidential payment to till settlements.

### **8. Wearable:**

The new trend in the smart world is wearable technology which is going to connect smart watches of users to en cash the retail banking services in their footsteps. This technology has changed the way users perform their daily activity by tapping on their wearable's they experience a user-friendly interface that provides the banking services of payment of bills.

### **9. Augmented Reality:**

Users are allowed to cover digital information on top of the real-world environment. Banks and financial institutions can engage customers and create new immersive experiences through smart phones. The need for augmented reality in the banking sector is very important it offers customers to look after the data in a minimized way. And it is going to provide the live experience of a branch without visiting the branch physically. This is one of the high-tech services which the banks are looking forward to providing for their customers for a better experience without compromising time, speed, and cost.

- A. Locating ATM
- B. Payment service's
- C. Self-services
- D. Customer acquisition
- E. Security
- F. Minimal documentation

Challenges of augmented reality:

- A. Technical challenges
- B. Lack of regulations
- C. Lack of public awareness
- D. Improved customer services:
- E. Improved customer's services:

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It is necessary for very banks must adopt customer care service which is going to solve complaints of customers by providing the services 24X7 accesses throughout the year. With the help of this banks can maintain transparency and efficiency in their banking business and also secure the privacy of customers by allowing them to dial and solve the problems they are facing. This technology is used by all bank customers not only for compliance but also for any queries on their banking accounts.

### **Some of the challenges Fin-tech companies face in providing banking technologies:**

#### **1. Information security**

Securing the confidential information of customers is a big task for each bank because of internet banking, mobile banking, and payment application system. Fin-tech has provided these above services to experience smooth banking services for its customers, which again deal with technology. This kind of technology-oriented service creates a fear of personal data hacks from which the customer hesitates to adopt the technology in advance.

#### **2. Government protocols**

Fin-tech companies have to meet the requirements of government regulation with the support of this they can distribute their technology-oriented services to its customer. The government approvals on certain technology take a long time which is very difficult for fin-tech companies to proceed in their business.

#### **3. Customer retention and experience**

Another challenge the fin-tech companies face while providing advanced technology is customer retention with a high set of new experiences. The fin-tech companies have to look at both the side of the customer i.e., the high-tech customer also the general customer which makes them easily access the services based on this they have to create the technology for the smooth functioning of banks.

### **Conclusion**

Indian banking, basically a decade back uses the traditional system of banking as the demand and advancement in banking system taken place it made a way for each Indian banks to look forward in adopting the advance technologies in their banking business, further to incorporate this



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strategy the financial technology companies joined their hands to suit the requirements of Indian banks by back up with robust technology to take up the technology in banking. Further the fin-tech services allowed the users to en cash the banking services and to be a part of smart economy.

### **References:**

Deepa Chauhan (2021), titled "Role of innovation on the performance of Indian banking sector", PalArch's, journal of archaeology of Egypt ,18 (18) 2021

Smt. V. Vimala (2015), "The Impact of Information Technology Adoption on the Customers of Bank of India, Bangalore Urban – An Evaluative Study", IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 17, Issue 3.Ver. I (Mar. 2015), PP 39-44

Nguyen Thi Kim LIEN, Thu-Trang Thi DOAN, Toan Ngoc BUI (2020) titled "Fintech and Banking: Evidence from Vietnam", Journal of Asian Finance, Economics and Business Vol 7 No 9 (2020) 419–426

Francesca Arnaboldi and Bruno Rossignoli (2015) titled "Financial Innovation in Banking"

GencayTepe, UmutBurakGeyikci, Fatih Mehmet Sancak, titled "FinTech Companies: A Bibliometric Analysis", Journal of Financial Studies 10.2, 2021.

Pawan Kumar D.B, Shruthi C, Meghana S.M, (2022), titled "Banking Innovations", Vision book house.

<https://www.easyleadz.com/lists/Fintech-companies-in-India>

<http://www.enterpriseedges.com/fintech-shaping-future-banking-industry>

<https://www.techtarget.com/serachenterpriseai/feature/AI-in-banking-industry-brings-operational-improvements>

<http://www.javatpoint.com/type-of-cloud>

<http://www.techtic.com/blog/fintech-industry-challenges/>

## **A STUDY ON FINANCIAL INCLUSION THROUGH FINTECH**

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Financial Technology has made a tremendous change in the field of Financial Industry. Financial Inclusion has made the unbanked people of society to be a part of the financial system in which it helps to accelerate financial literacy and in turn improve job and social security. In this context the government has played a major role in promoting Financial Inclusion through Fintech. The purpose of this article is to know the roles played by RBI in Financial Inclusion through Fintech. The Indian financial landscape has seen a major improvement in its infrastructure with the launch of Unified Payments Interface (UPI), Bharat Interface for Money (BHIM), and many others by RBI and Government. It has been further pushed by the launch of 'Digital India' and 'Make in India' campaigns, aligned with the RBI's vision to accelerate FinTech adoption. Currently, India has 33 soon corns out of which, 39 per cent of them are in the digital lending segment. The article highlights on one major role played by RBI, based on three parameters i.e Usage, insurance and mobile money. The study will focus on secondary data, in which data is collected from RBI websites. The study has found that the advancement in financial technology has spurred economic growth and has promoted financial inclusion in the country.

### **INTRODUCTION**

India is a growing economy there are lot of Fin-tech Companies which are making an impact. Being a developing country making the financial resources available to every citizen has been key focus of the government. There are lots of schemes like Jan Dhan Yojana where citizens are allowed to open zero balance accounts. By trying to bring the unorganized sector into mainstream economy we need the support of technology companies. Fin-tech Helped in increasing Sub Saharan African countries GDP by \$40 Billion. In this article we will try to analyze how Fin-tech companies can play a key role in Financial Inclusion.

### **Fin-tech concept**

As per investopedia, financial technology (better known as fin-tech) is used to describe new technology that seeks to improve and automate the delivery and use of financial services. At its core, fin-tech is utilized to help companies, business owners, and consumers better manage their

financial operations, processes, and lives. It is composed of specialized software and algorithms that are used on computers and smart phones. Fin-tech, the word, is a shortened combination of “financial technology.”

- Fin-tech refers to the integration of technology into offerings by financial services companies to improve their use and delivery to consumers.
- It primarily works by unbundling offerings by such firms and creating new markets for them.
- Companies in the finance industry that use fin-tech have expanded financial inclusion and use technology to cut down on operational costs.
- Fin-tech funding is on the rise, but regulatory problems exist.
- Examples of fin-tech applications include robo-advisors, payment apps, peer-to-peer (P2P) lending apps, investment apps, and crypto apps, among others.

### **Financial Inclusion concept**

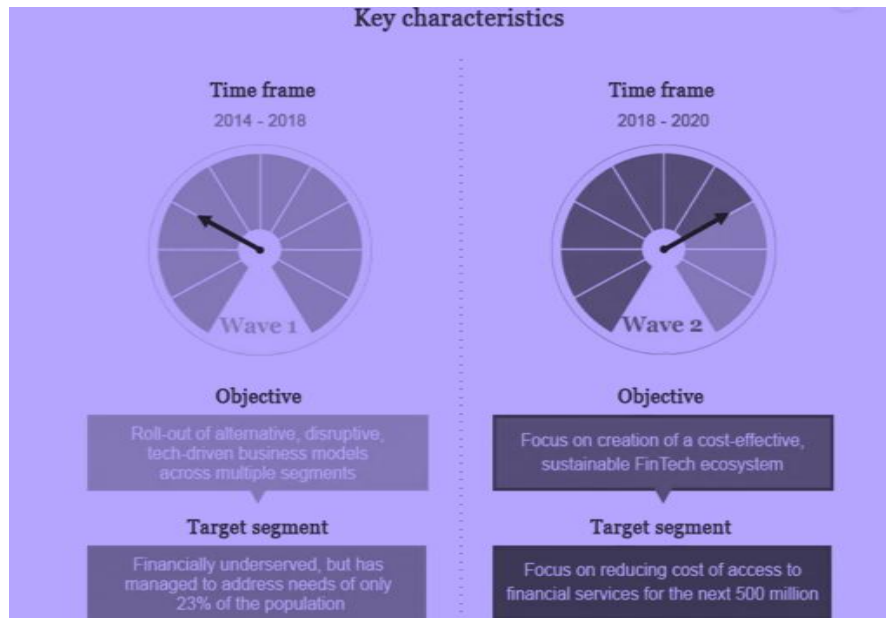
Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.

- Financial inclusion has been identified as an enabler for 7 of the 17 Sustainable Development Goals.
- The G20 committed to advance financial inclusion worldwide and reaffirmed its commitment to implement the G20 High-Level Principles for Digital Financial Inclusion.
- The World Bank Group considers financial inclusion a key enabler to reduce extreme poverty and boost shared prosperity.

### **Fin-tech Aids Financial Inclusion**

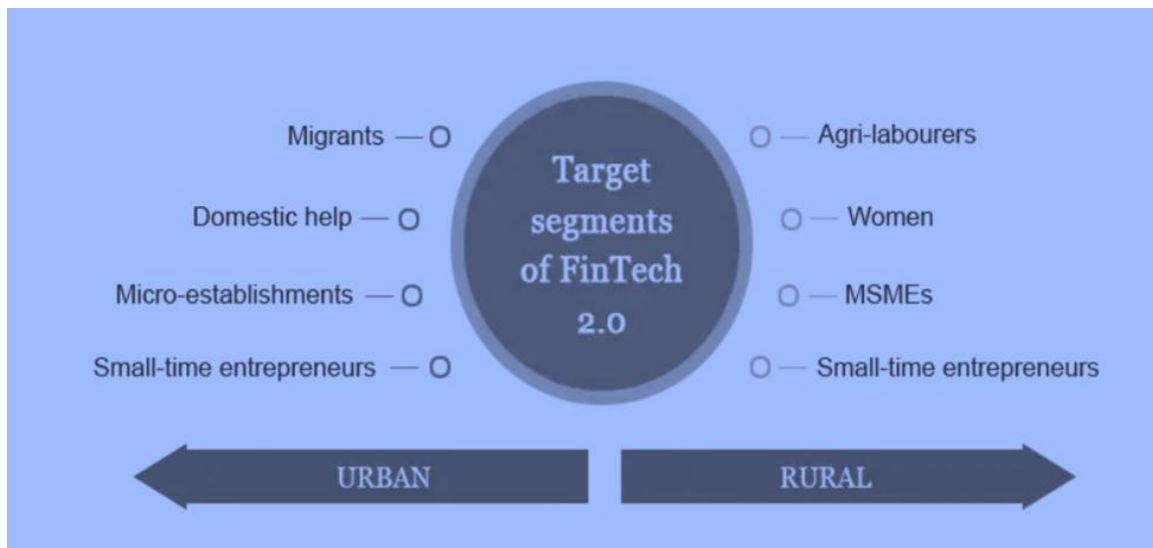
Fin-tech 1.0-Primary objective of 1.0 was on reaching the underserved and reaching at least 23% of population. Fin-tech 2.0 -Primary objective of 2.0 was reducing the cost of access of financial services

## Growing Infrastructure A key to Transforming Indian Economy



(Source: FinTech 2.0: A new era of financial inclusion - PwC India)

The following are the sectors that are in focus by Fin-tech in future. By concentrating on these sectors there are trying to reach at least 500 million population



(Source: Fin-Tech 2.0: A new era of financial inclusion - PwC India)

The following are the key factors which fin-tech companies can focus on to achieve Financial Inclusion

1. Reaching remote parts of country
2. Credit Access Increase
3. Focus on innovation
4. Digital Economy

### **REVIEW OF LITERATURE**

Financial technology provides various services. The study aims on the evolution of fin-tech industry and focuses on the present scenario of the Indian finance sector (Vijai (2019)). Transformation of service from traditional delivery to digitalization era (Peter Gomber, Et al (2017)) the study understands role of RBI with respect to Financial Inclusion. Expectations on customer and innovative models to towards fin-tech are considered. (DorianLaurentiuFlorea, Et al (2021)). Further the study points out on the concept of usage of Fintech product and services. Impact of fin-tech on the Banking services (Murinde Et al (2022)). The characteristics of fin-tech and impact it's on the financial inclusion. (Popescu, A. D. (2019)). The paper focus on usage insurance and mobile money, financial Inclusion has driven a positive impact in the economy. (Inoussa, H. (2021)).

### **OBJECTIVES OF THE STUDY**

1. To know the Role of RBI in promoting financial inclusion through Fin-tech in India.

### **RESEARCH METHODOLOGY**

This study is based on secondary research. Data is obtained from reliable sources. The study will try to analyze the data obtained and try to arrive on the finding and conclusions regarding the same.

### **ANALYSIS AND INTERPRETATIONS**

#### **1. Role of RBI in Fin-tech and Financial Inclusion**

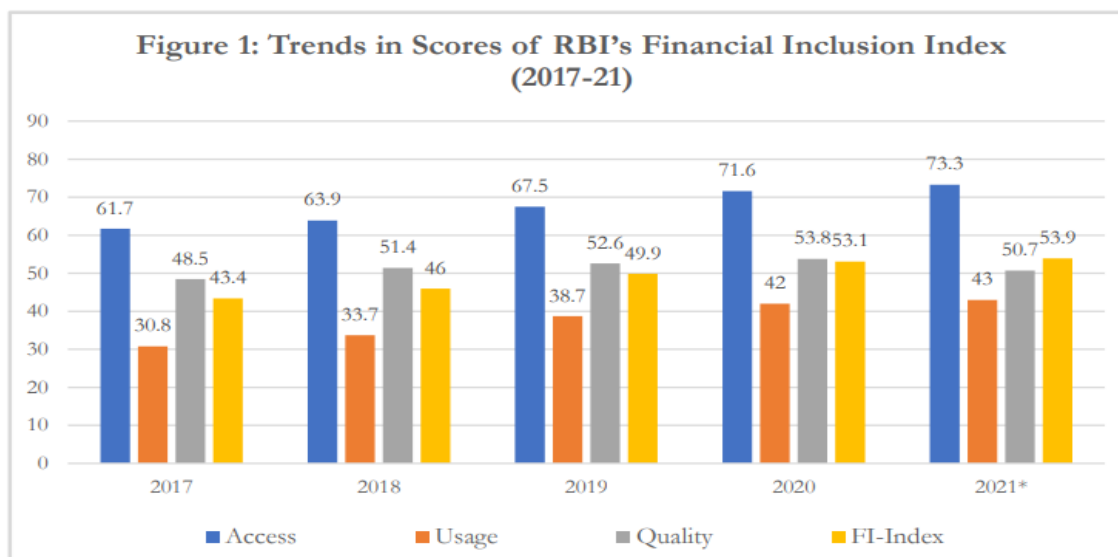
The Indian financial landscape has seen a major improvement in its infrastructure with the launch of Unified Payments Interface (UPI), Bharat Interface for Money (BHIM), and many

## Growing Infrastructure A key to Transforming Indian Economy

others by RBI and Government. It has been further pushed by the launch of ‘Digital India’ and ‘Make in India’ campaigns, aligned with the RBI’s vision to accelerate Fin-Tech adoption.

Throughout the decade, many socioeconomic factors have led to the favorable growth of the Indian digital lending market. It is set to grow at a CAGR of 22 per cent from \$270 billion in 2022 and become a \$1.3 trillion market opportunity by 2030. Other data indicates digital lending is set to account for 60 per cent of the total Fin-Tech market in India by 2030. Currently, India has 33 soon corns out of which, 39 per cent of them are in the digital lending segment.

In 2021, the Reserve Bank of India introduced the index of financial inclusion that captured information on various aspects of financial inclusion ranging from 0 to 100 with a weight age of Access (35%), Usage (45%), and Quality (20%). With an increasing overall index score standing at 53.9 in 2021, figure 1 highlights that the access dimension has received higher scores consistently over the years reaching a maximum of 73.3 in 2021. This has been corroborated by the World Bank’s 2021 financial inclusion report that from 35% in 2011 to 78% in 2021, account ownership has more than doubled in the last ten years. Particularly, between 2014 and 2017, account ownership in India increased by 27 percentage points compared to 8 percentage points in developing economies. It reflects the consistent efforts by the Government to improve access around the nation. What is particularly intriguing is that the usage dimension is lagging significantly with a score of 43 in 2021



(Source: RBI)

### **Usage of Financial Products and Services among Individuals and Households**

The objective of financial inclusion is achieved among households in the event of sustained 'usage' concerning various financial products and services. The provision of financial products is primarily dependent on the evolution of the financial ecosystem whereas the usage aspect in addition to that is intertwined with contexts like behavior pertaining to adoption through overcoming barriers of perception, cost, beliefs, trust, security, and lack of knowledge and awareness. Therefore, these need to be addressed to achieve financial inclusion and the financial well-being of individuals.

### **Ownership of Bank Accounts and Savings**

The primary indicator of financial inclusion is ownership of a bank account. With the Jan Dhan Yojana lot of underprivileged got access to organized banking. Our findings on the same can be found in Findings section

### **Insurance**

The insurance sector has faced lower penetration (premium as a percentage of GDP) and density in India (Ray et al., 2020). The pandemic has brought major shift in attitude towards insurance products<sup>67</sup> and expected a year-on-year growth of 6.6 % in 2022. From 2021–2022 through the end of January 2022, life insurers' gross first-year premium climbed by 6.94%, totaling Rs. 2,27,188 corers. Any insurance program's success depends on clearly established procedures for payments, referrals, complaints, and quality control measures.

### **Mobile Money: UPI and Fin-Techs revolutionized the game**

Financial Technology companies also known as the 'neo-banking' space have powered the drive for financial inclusion and its expansion can be seen with estimates that the fin-tech sector is expected to reach \$ 200 billion in revenues by 2030. One technological innovation that changed the mobile money, wallets, and payments interface has been the Unified Payments Interface (UPI). Since the pilot launch in April 2016 by RBI, (UPI), a payment system that accommodates multiple bank accounts into a single mobile application while allowing interoperability of various merchant payments, seamless routing of funds, and 'peer to peer payment collection

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requests and authentication mechanisms at the click of the button has practically revolutionized the way digital payment transactions are made in India going completely cashless.

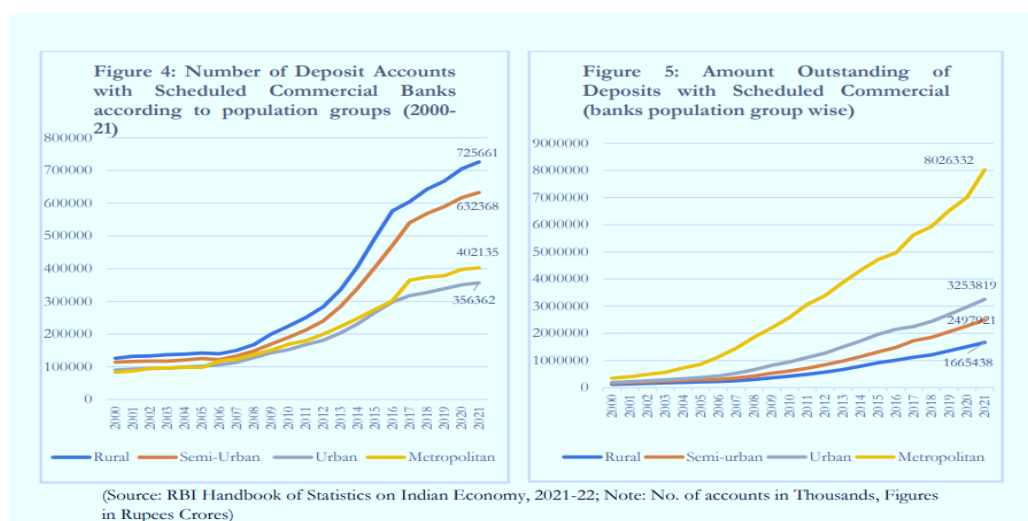
Considering the growing number of soon comers, and encouraging innovation in the Fin-Tech landscape, RBI has stated that products and credit delivery methods should ensure orderly growth, preserve financial stability, and ensure the protection of depositors' and consumers' interests. Having said that, certain concerns have also emerged that if not mitigated may make it challenging for the public to trust in the digital lending ecosystem. The concerns are primarily focused on the engagement of third parties, misspelling, threats to data safety and privacy, lending for unfair business practices and unethical recovery processes.

In an effort to protect the consumers' interest in the digital lending ecosystem, RBI has also constituted a working group on digital lending and extended permissible and safe credit facilitation services.

### CONCEPTUAL TEXT OF THE STUDY

#### 1. Ownership of Bank Accounts and Savings

Figure 1 highlights the growth in deposit accounts with scheduled commercial branches which indicates that the rural population covering the majority has the highest number of deposit accounts followed by semi-urban, metropolitan and urban areas whereas the amount outstanding with scheduled commercial banks (shown in figure 2) is in the reverse order with the maximum amount in the urban areas which draws attention to marginal and small savings in the rural and semi-urban areas.





### 2. Insurance

With the Online and offline channels they were able to reach a larger part of population in which fin-tech played a major role. Some of the schemes that have helped insurance reach the vulnerable population are as follows: -

a) Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) The 2015 program's goal is to provide coverage for death from any cause to the uninsured, especially the poor class. All bank account holders who subscribe to the plan are given a renewable 2-lakh-rupee term life insurance policy (aged 18-50). As of July 2022, 5,93,316 claims totaling 11,866 crores were paid under the scheme for an annual premium of just Rs. 436.

b) Pradhan Mantri Suraksha Bima Yojana (PMSBY) To all subscribing bank holders, the PMSBY scheme provides a renewable one-year accidental death/disability cover (aged 18-70).

A subscriber is eligible for a claim of Rs. 2 lakhs in case of death or whole disability and a claim of Rs. 1 lakh in case of partial disability with an annual payment of just Rs. 20 through auto debit.

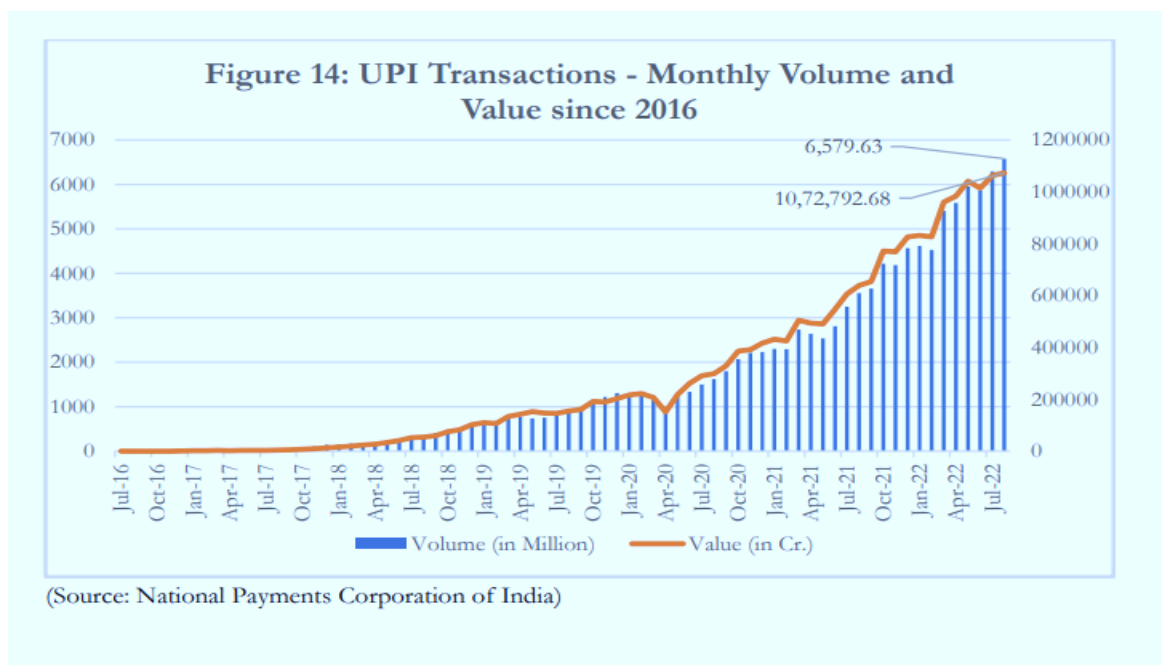
The PMSBY system had 24 corers cumulative enrollees as of July 2021, with 45.8% of them being women, and a total claim of Rs. 972.6 corers (US\$ 133 million).

c) Ayushman Bharat Yojana under PMJAY The scheme aims to address health disparity and reduce patient health costs. It is one of the largest scale-wide healthcare schemes globally aimed at covering 50 corer individuals with coverage of up to Rs. 5 lakhs.

### 3. Mobile Money: UPI and Fin-Techs revolutionized the game

Figure 3 takes through the growth in both the volume as well as the value of transactions made through UPI with more than 6.5 billion transactions worth Rs. 10.72 trillion in August 2022.

The data from RBI's Handbook 2021-22 further mirrors the trends and patterns underlining the rapid uptake of digital financial transactions where the total digital payments transactions grew at 65% YoY in 2021-22 putting India at the helm in terms of real time transactions in the world at 48 billion in 2021.



### FINDINGS AND CONCLUSION

RBI is backing the stakeholders in the fin-Tech industry to set up 75 DBUs in a record six months in 75 districts in the country. It will act as a key enabler in the digital ecosystem by facilitating convenient banking transactions and augmenting the government's effort in promoting financial inclusion. If implemented properly, DBU will play an integral role in providing end-to-end digital processing of small ticket retail and MSME loans and savings, credit, and insurance facilities to local households.

The advancement in financial technology has spurred economic growth and has promoted financial inclusion in the country. To continue this exponential growth trajectory, all stakeholders must identify vital problems and work on a solution to implement robust and favorable solutions for the country.

Financial inclusion, however, is not only a goal in itself, but also a means to an end as an enabler and accelerator of economic growth. It has a multiplier effect, contributes to the economic development and stability of a country, and aids the achievement of the UN Sustainable Development Goals. Through WBG work, they aim to give the 1.7 billion remaining unbanked mostly poor, mostly women access to basic financial services.

## **Growing Infrastructure A key to Transforming Indian Economy**

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The emergence of digital financial services in the form of the FinTech revolution has disrupted the core services and pushed banks towards innovation to stay relevant. It has opened various opportunities to experiment with dynamic forms of products and services on offer. Taking credit as a point of discussion, COVID-19 has immensely affected households and micro, medium, and large enterprises and limited their access to credit, and diminished their ability to repay debt. Digital credit is an evolving proposition using smart phone technology or web platforms that has served the needs of many households and business enterprises as well.

The recent announcement<sup>15</sup> for zero merchant fees (MDR) for Ru Pay credit cards on UPI for transactions up to Rs. 2000 is a step ahead to making small credit available to the masses while being able to have a cash flow-based credit mechanism to manage credit-based risk. Another development is the framework<sup>16</sup> introduced for geo-tagging of payment system touch points by RBI in March 2022 where digital payment transactions can be mapped and traced through payment touch point details via the information on PoS terminals, QR Codes, etc.

This could in the future provide data on regional penetration of digital payments and can help bring financial services to the underserved areas in the country thereby bridging the geographic digital divide. With all the new possibilities of paradigm shifts augmented by digital finance, a new set of risks surfaces many fold for financial inclusion.

The neo-banks are more exposed than their traditional counterparts and are less collateralized which poses a system-wide risk<sup>17</sup>. Additionally, cyber insecurity via frauds, leakage of confidential information, cyber-attacks, etc. is growing globally<sup>18</sup>, thus summing the risks attached to digital finance.

To ensure that income inequality is reduced rather than widened with technological advantage at the hands of the few and the divide between rural-urban is plugged, it is imperative to strengthen capacity for say, fraud prevention and credit assessment using technological interventions, enabling enforcing contractual and property rights, protecting investors, allowing fair competition and ensuring financial stability.

So, fostering a regulatory framework is required instead of resisting new technologies, private sector-led innovations need to be passively accepted to reap efficiency gains.

### BIBLIOGRAPHY

[Fin-Tech 2.0: A new era of financial inclusion - PwC India](#)

[Role of Fin-tech in Accelerating Financial Inclusion: How Rupeek is Democratizing Access to Gold-backed Credit – Sales force Blog](#)

[Financial Inclusion \(worldbank.org\)](#)

[RBI promoting financial inclusion through fintech's in India | The Financial Express](#)

[On fintech and financial inclusion \(worldbank.org\)](#)

[Leveraging fintech to deepen financial inclusion in Eswatini – Spark](#)

### REFERENCES

1. [Financial Inclusion in India: Inching Closer to the Last Mile \(eacpm.gov.in\)](#) Vijai, C. (2019). FinTech in India—opportunities and challenges. *SAARJ Journal on Banking & Insurance Research (SJBIR) Vol, 8*.
2. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and FinTech: current research and future research directions. *Journal of Business Economics, 87*, 537-580.
3. Barbu, C. M., Florea, D. L., Dabija, D. C., & Barbu, M. C. R. (2021). Customer experience in fintech. *Journal of Theoretical and Applied Electronic Commerce Research, 16*(5), 1415-1433.
4. Murinde, V., Rizopoulos, E., & Zachariadis, M. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International Review of Financial Analysis, 81*, 102103.
5. Popescu, A. D. (2019). Empowering financial inclusion through fintech. *Social Sciences and Education Research Review, 6*(2), 198-215. Empowering financial inclusion through fintech. *Social Sciences and Education Research Review, 6*(2), 198-215.
6. Inoussa, H. (2021). The FinTech-driven Approach to Financial Inclusion: A cross-sectional study of how Financial Inclusion furthers Sustainable Development in Sub-Saharan Africa.

**CBDC- as digital currency of central bank of India**

**Digital Rupee: India's Bold Ambition.**

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**Abstract:**

CBDC is central bank's digital currency .it is legal tender issued by central bank in digital form. Digital Re a step closer to reality, it is most important step taken by RBI .We all are aware about the crypto currency which is a digital currency and it is alternative form of payment.

The main reason behind the concept of CBDC is to overcome from the drawbacks of crypto currency which is not a legal tender. RBI announced that nine banks, namely SBI, HDFC, kotak - mahindra bank, Bank of Baroda, Union bank of India, ICICI Bank, Yes Bank, IDFC first bank and HSBC participate in the pilot project.

The e-Re is not same as other crypto currencies such as Bitcoin, e-Re has intrinsic value and is regulated by the RBI, e-Re will always have same value as of physical bank currency notes. Wholesale CBDC is applicable to financial institutions that hold reserve deposits with central bank. In contract the digital currency issued to the general public is known as retail CBDC.

The RBI has launched its pilot's project on the digital rupee in the wholesale segment (e Rs-W) on November 1 2022 and in the Retail segment (e Rs -R) on December 1 2022. Digital or e - rupee worth over Rs 130 corer is in circulation on a pilot basis as of February 28, 2023, Financial Minister Nirmala Sitharaman said on March 13, 2023.

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**Key words:** *CBDC, RBI, Digital currency, SBI*

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## **Growing Infrastructure A key to Transforming Indian Economy**

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### **Introduction:**

CBDC is the form of having own central currency with control under the government, because central bank dislike private, decentralized money since they cannot control the supply of it and it also threatens the sovereignty of the national currency.

It is a digitized version of Domestic currency that's equal to physical cash and i use or the reserves that your commercial bank holds at the central bank. CBDC are a direct liability of Central bank and are most likely token based where these tokens would be represented on a block chain established by central bank.

### **Objectives:**

The question arise why the push for CBDC? the goals and objectives to introduce CBDC is having own currency which boosts financial inclusion, makes the economy less dependent on cash, creates a scenario for lower usage of private digital currencies, Reduces cost in printing currency, retail CBDC helps access to safe money for payments and settlement whereas wholesale CBDC helps lower transaction costs for banks in quicker settlement of trades.

Numerous central banks around the world from countries like china to Sweden, South Africa to the European union secb that's European central bank are working on their own state issued central bank digital currencies.

Unlike public crypto currency like Bitcoin and ethereum where the information recorded is available to all these are private or permission block chains which only the central bank and the parties chooses can have access to .

### **Types of CBDC:**

**Wholesale CBDC** - The wholesale CBDC that is wholesale segment in CBDC (e Rs-W) is launched by RBI through Pilot project on November 1, 2022, It is used to facilitate payments between central bank and commercial bank or the entities that hold accounts with the central bank.

It is applicable to financial institutions that hold reserve deposits with central bank it includes institutions which can lend money and make cross - border payments. In case of cross border

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agreements the central bank act as a counter party. Have to do with the plumbing and the infrastructure of financial system and does not affect individuals.

**Retail CBDC-** the Retail segment of CBDC (e Rs-R) launched by RBI through Pilot project is on December 1, 2022. The digital currency which is issued to the general public is known as retail CBDC. This can be used by business and individuals. It's like currency in your mobile wallet issued directly by central bank.

It could be a game changer and have huge implications for any country. The retail CBDC occurs among closed user groups made of customers. There are so many unbanked or under banked people in developing nations around the world like India.

Central bank digital currency could make a strong case for financial inclusion because central bank would directly transfers funds to the unbanked.

### **Literature review:**

E-rupee worth over Rs. 130 corer in circulation: Sitharaman. The Reserve Bank of India (RBI) had launched pilots in digital rupee in the wholesale segment (e□-W) on November 1, 2022 and in the retail segment (e□-R) on December 1, 2022

Digital or e-rupee worth over Rs. 130 corer is in circulation on a pilot basis as of February 28, Finance Minister Nirmala Sitharaman said on March 13. The Reserve Bank of India (RBI) had launched pilots in digital rupee in the wholesale segment (e□-W) November 1, 2022 and in the retail segment (e□-R) on December 1, 2022.

Nine banks, viz., State Bank of India, Bank of Baroda, Union Bank of India, HDFC Bank, ICICI Bank, Kotak Mahindra Bank, Yes Bank, IDFC First Bank and HSBC, have been participating in the digital rupee wholesale pilot, Ms. Sitharaman said.

As on February 28, 2023, the total digital rupee - Retail (e□-R) and digital rupee - wholesale (e□-W) in circulation is Rs 4.14 corer and Rs 126.27 corer, respectively," Ms. Sitharaman said in a written reply in the Lok Sabha. The e□-R is in the form of a digital token that represents legal tender. It is being issued in the same denominations that paper currency and coins are currently issued.

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It is being distributed through financial intermediaries, i.e., banks. Users can transact with e₹-R through a digital wallet offered by the participating banks and stored on mobile phones/devices. The e₹ pilot for retail segment was launched on December 1, 2022 in 5 select locations in dosed user group for making Person to Person (P2P) and Person to Merchant (P2M) transactions.

### **Conclusion:**

To promote digital India initiative and encourage for e- wallet as like as physical currency the Indian government took very good step. impact on Indian economy like, for banks and corporate CBDC can make a significant difference in terms of electronic payment, Reducing settlement risk, Increasing liquidity,

Facilitates "internationalization of the rupee" It will also help ecosystem for the web 3.0 economies. CBDC is likely to bring a pragmatic shift to the economy with monetary transactions in the future digitally. It promotes both improvement and efficiency in the overall monetary infrastructure by adopting this currency system

### **REFERENCES**

1. Financial Inclusion in India: Inching Closer to the Last Mile (eacpm.gov.in) Vijai, C. (2019). FinTech in India—opportunities and challenges. *SAARJ Journal on Banking & Insurance Research (SJBIR) Vol, 8*.
2. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and FinTech: current research and future research directions. *Journal of Business Economics, 87*, 537-580.
3. Barbu, C. M., Florea, D. L., Dabija, D. C., & Barbu, M. C. R. (2021). Customer experience in fintech. *Journal of Theoretical and Applied Electronic Commerce Research, 16*(5), 1415-1433.
4. Murinde, V., Rizopoulos, E., & Zachariadis, M. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International Review of Financial Analysis, 81*, 102103.
5. Popescu, A. D. (2019). Empowering financial inclusion through fintech. *Social Sciences and Education Research Review, 6*(2), 198-215.). Empowering financial inclusion through fintech. *Social Sciences and Education Research Review, 6*(2), 198-215.



**A Study on Effectiveness of E-filing in the Income Tax Self-Taxation in India**

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**ABSTARCT**

Income tax is a strong tool that has the potential to significantly improve both the economy and society. The government's tax revenue will be of considerable assistance to the citizens. As the paper studies the opportunities provided for the individuals to file the Income Tax digitally. It also includes the effectiveness of self taxation by adopting the E-filing portal.

Electronic filing system has improved the self-taxation among the citizens as compared to offline Tax Filing. Based on the findings of the studies and the data collected through primary and secondary data related to E-filing and self-taxation and the useful of E-filing version 2.0 has showed the level of satisfaction, interest, and preference of each individual by using the E -Filing portal. Finally, this paper concludes by discussing suggestions and recommendations that could be addressed in the future studies.

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**Keywords:** *E-filing, Self-Taxation, E-filing2.0, Income Tax.*

### **INTRODUCTION**

Income Tax is a direct tax that a government levies on the income of each individual of its citizens. The origin of “Tax” is from “Taxation” which means an estimate. The term income tax refers to a type of tax that government impose on income generated by salary, House Property, Business, Profession, Short Term Capital Gain, Long Term Capital Gain, and any income from Other Sources as per the Constitution of India as it states that no one has the right to levy taxes except the authority of law or the parliament. These taxes are considered as revenue for Government. The main purpose of taxes is to provide the government with funds for spending without inflation. These are used for Infrastructure and Development activities, Welfare activities, Education, and public services. Each and every individual has a responsible for reporting their total income correctly and should pay their tax properly. As we know, Direct Taxation is one of the sources of income for India. It also affects inflation, demand, and supply within the economy by regulating disposable income across the board.

If a tax is important even the filing of tax is also important to declare all the income, expenses, tax deductions, investments taxes etc. The Government mandates that the individual or Corporate who earns a specified income must file a tax according to Income Tax Act 1961.

Now the technology affects almost every aspect of 21<sup>st</sup> century. The Advancement in Digital world has been step forwarded in the Tax system in Indian countries. As we are in digital world even the Income tax is also updated to E-filing, E-filing is a system of filing the income tax returns electronically through the internet, mobile phones or laptops etc.

Even the government has introduced the official portal of Income Tax Department, Ministry of Finance, and government of India. The Indian Government agency which runs the website of new version of Income Tax Portal which is also called as E-filing version 2.0 has provided the facility of filing income tax electronically. It has also been user friendly to understand the concept and procedure for filing the IT returns. The main caption of the Government is “Anywhere Anytime”. This portal has improved every individual filing the income tax from Chartered Accountants as the technology has advanced to self-taxation with regards to the income tax filings individually.

### REVIEW OF LITERATURE

I. E-FILING OF INCOME TAX RETURNS IN INDIA (AN OVERVIEW) Jyoti Arora.

The paper has focused on how the digital has improved to e-filing and the benefits of filing the returns through electronically, and the process of e-filing. This paper studies how the e-taxation system in India has been progressed with help of digital technology. The trends in the usage of e-filing system in India have focused with the quantitative analysis, the differentiation of ITR forms of users.

The Digital Era has fast moving in all the fields. E-filing is the new way of filing the returns from anywhere anytime as it reduces cost, time and even the paper works and also as it records and stores the incomes information safely and securely by the way of userid and password. Even the taxpayers are benefitted through e-payments services. Therefore, the paper has analyzed that e-filing will become a full-time place in Indian Tax system.

II. THE TRENDS AND RESPONSIVENESS OF PERSONAL INCOME TAX IN INDIA – Ankita Gupta.

This paper studies that how the tax structures are involved in India and the effectiveness of tax will result to the Indian Economy. The trends in the Income Tax refer to a good taxation system by revenue of tax, changes in national income. This paper analyses the responsiveness of Personal Taxation and growth of tax with the growth of National Income.

III. FACTORS AFFECTING THE ADOPTION OF E-FILING OF INCOME TAX RETURNS IN INDIA - Summit Kumar Maji and Kalyan Pal

This paper has focused on e-filing system in India, by determining the different trends of e-filing techniques, the tax professionals surveyed and satisfied with the e-filing procedures and updated version of e-filing techniques. This paper also evaluates the risk associated with the e-filing system, level of satisfaction with the users.

This paper has concluded as the digital technology now a days are fast moving in all the fields like that even the income tax filing also has been developed. It has a positive impact towards the level of satisfaction and user friendly and even cost effective also.

IV. INCOME TAX DEPARTMENT OF INDIA: A SUMMARY ASSESSMENT  
Dr.Sanjeeb Kumar Dey

This paper evaluates that the income tax deserves a great attention in the Indian Economy. As, the direct tax and indirect tax both are raised by the Central Government for the necessities of the public finance, and these studies the various aspects of income tax system related to the tax structure and the lack of digital updating, even it makes recommendations and evaluate the composition of tax revenue of the Central Government.

Also, these paper studies the overall framework of concepts, sections, coverage and contribution to tax and rationalization of tax rate returns.

V. AN EMPERICAL STUDY OF AWARENESS OF E-FILING- Dr. M. Ragupathi and G. Prabu

In the research paper they have proved that E-filed returns cost 20 times lesser than process which compared to than process which compared to paper return. They have also showed that majority of respondents are lack of awareness towards using of E-filing. The Income Tax has facilitated a lot of training programmers to e-filers. They have also mentioned most of the people who choose an option of e-filing rather than offline.

VI. THE ACCEPTAANCE OF THE E-FILING SYSTEM BY INDIAN TAXPAYERS: A CONCEPTUAL STUDY -Sukhjeet Kaur Matharu

In this Research paper they have showed the present status of e-taxation and what measures should be taken to popularize the e-filing. They also mentioned the factors of {TAM} Technology Acceptance Model.

In the year 2011-12, more than 16 million returns were filed online. With this research paper, they said that the government should invest more money in popularizing and advertising the e-filing which will help to reach this platform to the rural areas also.

### NEED OF THE STUDY

In the shifting scenario of digital technology across the world, self-taxation opportunities have been upgraded by the E-filing. The Developed Database of all Income Tax Department with this

income tax portal has made easier to file their own returns. Even the country has seen the increasing aspirations of Taxpayers. Like One Nation – One Platform the Government has updated the website of filing the Income tax returns in E-filings government portal. The main purpose of the study is to analyses the individual are filing through self-taxation, awareness towards self-taxation and to analyses the level of satisfaction towards self-taxation.

### **OBJECTIVES OF THE STUDY**

- I. To analyze the effectiveness of E-filing.
- II. To evaluate the individual preference and the level of awareness and the opportunities of self taxation.

### **METHODOLOGY**

In order to examine and access the individual income tax filing with regards to self filing - offline. The research is collected through both primary and secondary data. The Primary information is collected on Stratified Random Sampling with regard to individual's opinion on filing their income tax returns through e-filing (online) or offline and filing their returns with preference of self-filing or with the help of Chartered Accountant.

The Secondary information is collected on database, scholarly website like Google scholars, research gate etc., and the website of Income Tax Department.

### **EFFECTIVENESS OF E-FILING WITH REGARDS TO SELF TAXATION IN INCOME TAX PORTAL:**

#### **1. E-FILING VERSION 2.0:**

The income tax portal on an updated version has made every assessee to experience the convenience and user friendly to file their returns. The portal has its features to assist every individual with the help of elaborate sections and assistance and videos will make file the returns much easier. Even the caption itself says “Anywhere Anytime” as it works 24/7, anytime you can register access or file the income. The new era is becoming seamless, faceless and paperless, as it reduces the paperwork more and records the documents safely and securely. From this, even an individual with minimum knowledge can file their returns by self.

### **2. INSTANT PAN THROUGH AADHAAR:**

The portal has facilitated for getting pan number through Aadhaar card it is also called as e-PAN and the entire process is completely free of cost, paperless and online too. The applicant not required to submit any personal documents except Aadhaar. In India, the government has provided Aadhaar identification number to every citizen and it is mandatory to avail any services. By this, e-pan can be applied instantly.

### **3. FORM 26AS:**

It is an annual statement that includes all the information related to the individual about the Tax Deducted at Source (TDS), which means the tax collected by their collector like advance tax, self-assessment tax payments and this information will be visible on the Form 26AS and for self filing it is useful to assess their income and file their own returns and this information also regarding the refund which will you receive on their financial year. In this Income tax portal, it can be downloaded and can verify the details anytime. This helps the tax payer's e-file their returns accurately.

### **4. REAL TIME PROCESSING:**

The Income Tax Department has updated features with enabling quicker processing of their income tax returns. The CPC 2.0 version in the portal with the technology and procedural interventions, this would ensure equality in filing the returns. The Income Tax Department processes the income tax return only after they are file and successfully verified by the taxpayers. This helps the individual to e-verify the returns with the portal for the return on time for the speedy processing of the returns.

### **5. FACELESS AND PAPERLESS ASSESSMENT:**

For E-filing the returns in the portal, the entire process is now completely on electronic basis. On this any individuals can file their returns without any paperwork which is more convenient and transparent. This will reduce the time, effort and not include any physical presence. This leads to the self-filing easier and helpful for every assessee. The entire process is related to end-to-end electronic process no personal visits required.

### 6. TAX REFUND:

When an assessee files his Income Tax Returns through electronically that will be called as an E-filing. When a person pays extra tax by mistake then that amount will be automatically refunded to the person's bank account that paid the tax. Tax refund is a reimbursement of excess tax paid to the government. The refund amount is like a bonus for the tax assessee because there will not be any tax on the refunded amount. As this portal facilitates the availability of the refund process quickly by the authority of tax department it also shows the status of the filed ITR returns.

### 7. FASTER RESOLUTION OF YOUR QUERIES:

The customer support of Income Tax Department facilitates help towards any queries or doubts related to filing of Income tax through portal like queries related to income tax, processing related queries, TDS Reconciliation Analysis and Correction Enabling System (TRACES). This will help us to resolve the queries related to income tax for the individuals.

### 8. ANNUAL INFORMATION STATEMENT:

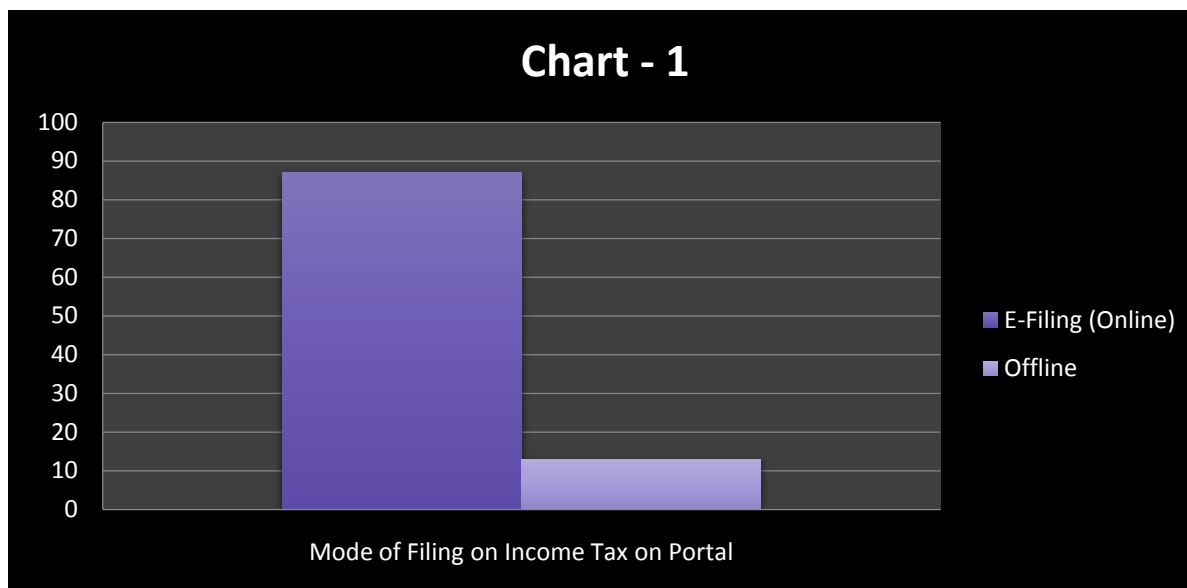
This is the annual report provided in the e-filing portal of every individuals tracking their income accurately by their PAN. If this income is not included in the Income Tax Filing, demand notice will be issued for the individuals by the Income Tax Authority.

## DATA ANALYSIS AND INTERPRETATION

### 1. Analysis of mode of filing that every individual will prefer based on offline and online (e-filing).

**TABLE NO. 1**

Sl. No.	Variable	Number of respondents	Percentage (%)
1.	E-filing (online)	67	87%
2.	Offline	10	13%



In the above Table No. 1 shows that 87% of E-Filing and 13% offline respondents. It shows that digital technology has developed, and majority of the people prefer the online option as compared to the offline option.

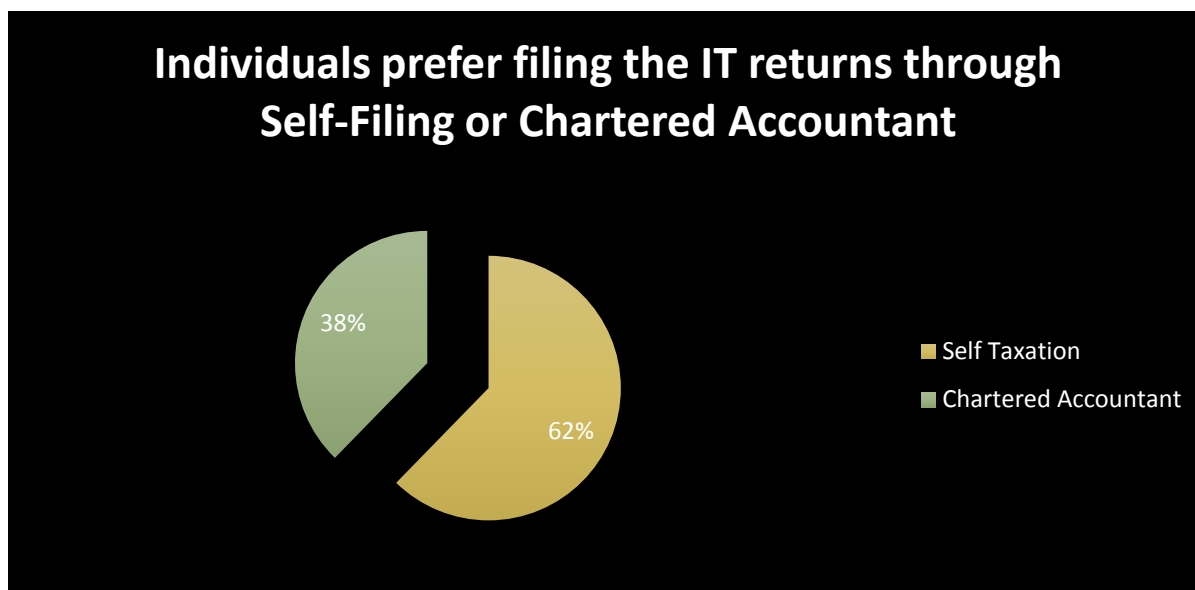
As the respondents are opted the online filings to file their own returns electronically. This means you no longer need to visit any nearest Income Tax Department to file their income tax returns physically.

**2. Analysis on Individual chooses for Filing the Income tax returns through Self Taxation or Chartered Accountant.**

**TABLE NO. 2**

Sl. No.	Variable	Number of respondents	Percentage (%)
1.	Self-Taxation	48	62.3%
2.	Chartered Accountant	29	37.7%





As this table refers to the study of 77 responses, comparatively the study analyses the self taxation has majority of 62% as compared to filing the income tax returns through chartered accountant as 38%.

The self taxation has been reduced the consultation of chartered accountant. The income tax department has facilitated the portal which helps to identify the sections and deductions to file the returns correctly.

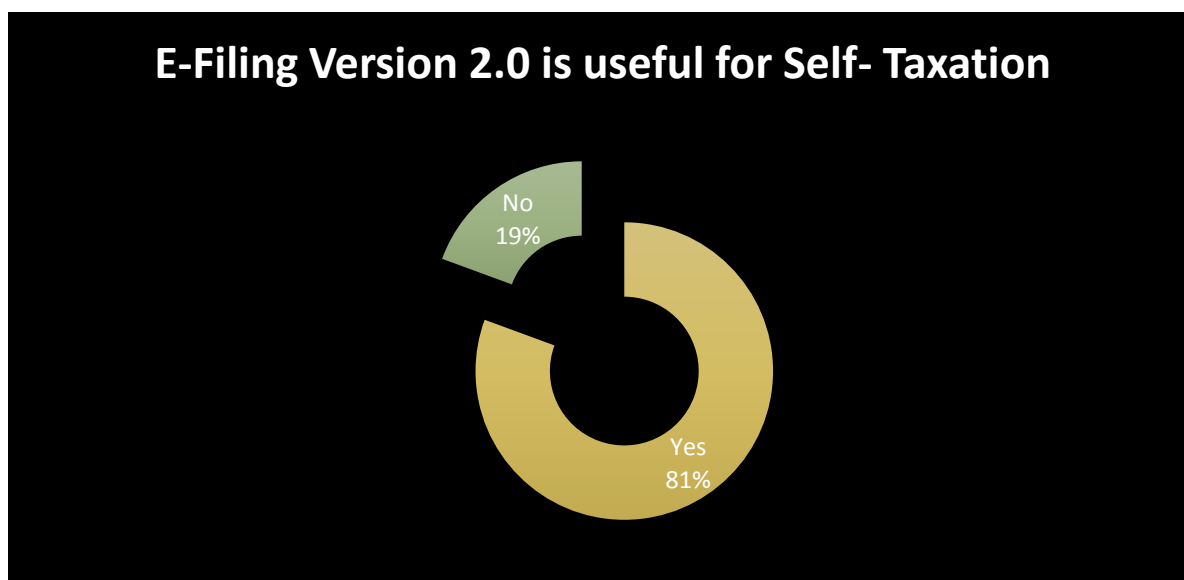
Analysis on the individuals few changes that they have observed in Government Income Tax Portal:

Income Tax Portal is having more financial transactions information of every individual which helps to catch tax evaders.

**3. Analysis on the new updated income tax portal (E-filing version 2.0) is useful for Self-Taxation**

**TABLE NO. 3**

Sl. No.	Variable	Number of respondents	Percentage (%)
1.	Yes	48	80.6%
2.	No	14	19.4%



As the table No.3 represents the 77 responses as it shows that people of 48 have opted e-filing version is useful.

It shows that the new updated version has been helpful for majority of individuals to file self-taxation through Income Tax Website.

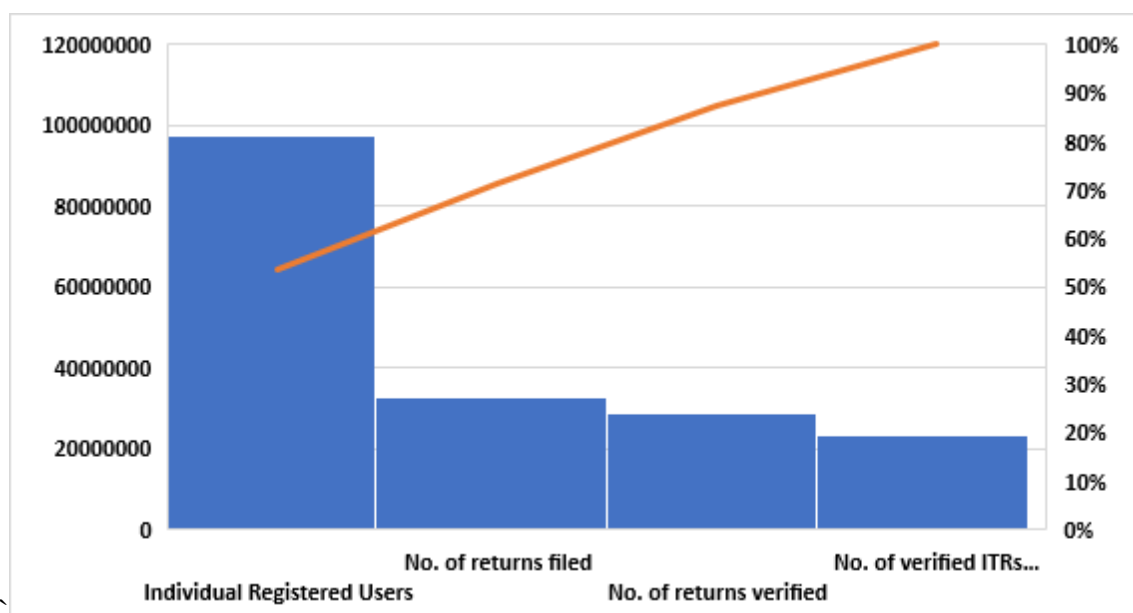
The data presentation shows that various numbers of individuals has increased compared to previous year.

The Taxpayers are becoming more as well as individual users opting E-filing options have been increased.

#### **4. Analysis on representation of the successful enablers as on Assessment Year 2021-22.**

**TABLE NO. 4**

<b>Sl. No.</b>	<b>Process</b>	<b>No. of Success Enablers</b>
1	Individual Registered Users	9,75,81,627
2	No. of Returns filed	3,24,49,960
3	No. of Returns verified	2,88,66,705
4	No. of verified ITRs processed	2,30,35,126



The Table No. 4 studies the number of Users of Income Tax Portal through e-filing (online) options, as it recognizes the tax user's commitment by filing their tax. We can expect a greater number of users for filing their returns through the income tax portal for the next coming era.

### **SUGGESTIONS AND RECOMMENDATIONS:**

Almost 80% of the individuals on salary income are filing their own returns by opting self-taxation through the income tax portal. But if any error occurs while filing their returns through self-taxation, the income tax procedures is so long and the individuals are not much aware of the procedures to clear and guide them, if any error occurs as the income tax authority can provide a solution within 24 hours. The Self Taxation will be increased. While Filing the returns many complaints has been increased because of the server issues especially in due dates of income tax returns. If the server issues resolved that will help other individual to file their own returns within the due dates, self-Taxation has been increased because the individual who is not interested to share their personal information to the tax professional. Government should focus more on securing the information of Tax payers. The government should bring the trust among the people in India.

Many individuals are doing know the sections and the procedure for filing Income Tax Returns through electronically. The government should reduce the procedure of filing the income tax returns in E-filing.

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### **CONCLUSION:**

By launching the new portal E-filing, the Income Tax department will provide free of cost ITR preparation software. This year on 7<sup>th</sup> June the government has launched the website. The new portal helps in processing the Income Tax Return immediately. Tax payers can proactively update their profile to provide their income details. This new e-filing portal to make tax filing is easy for all categories of taxpayers. The new E-filing portal is encouraging people to file their tax, it's makes things easier. It is also a part of step towards digitalization.

The New version of income tax portal has increased the self-taxation especially the ITR-1. ITR-1 is related to salary income. Any individuals opting for self-taxation the portal has been very useful and the detailed version of portal has made the individual to file their own returns. The opportunities of e-filing through self-taxation the level of awareness and satisfaction towards filing their own returns through electronically, the Income Tax portal has also been facilitated multiple payment options like, UPI, Debit card, credit card, internet banking etc. The digital storage of data has also been improved also we can collect all the information related to the old tax filed. The opportunities and effectiveness of e-filing with regards to self-taxation has been a great platform to know all the information and knowledge related to the Income tax, procedures.

The Final data evaluates and studies the individual's preference and satisfaction related to e-filing and self-taxation and the useful of income tax portal. As the data shows, the digital options have been increased, among 77 responses almost 80-90% of responses are completely satisfied and suggests the e-filing portal to others. Rapid increase in Income taxpayers and the access of more digital platform in the new era are showcasing the revolutionary changes due to the digitalization. The Final Conclusion studies the individuals with minimum skill can opt for e-filing in the income tax portal and file the income tax returns by opting Self-Taxation.

### **REFERENCES**

- (Arora, E-Filing if Income Tax Returns in India, 2016)
- (Gupta, The trends and responsiveness of personal income in India, 2009)
- (Maji, Factors affecting the adoption of E-filing of e-filing of income tax return in India, 2017)
- (Income Tax department of India: A summary assessment , 2014)
- (Prabu, An Emperical study of awareness of E-filing, 2015)
- (Matharu, The acceptance of the E-filing system by Indian taxpayers, 2015)

### The role of Technology Enabled Education in resolving

#### Un employability in India

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#### Abstract:

India is one of those ill-fated underdeveloped countries which is suffering from a huge unemployment problem which is the highlighting challenge that confronts the Narendra Modi-led government. The big challenge the government faces is how education may be rewired to focus on imparting knowledge that responds to market demand. In Toffler's words, how can education make students future ready. Unless it does this, education and employability cannot be correlated. To overcome the above challenge, Digital Technology has been a boon. In this regard, the government can provide digital technological advances during the education of an individual which in-turn can provide the solution for the unemployment problem. Some of the digital technology advances are:

Bring the right skills to youth. Massive Open Online Courses (MOOCs) let youth access low-cost, customizable education worldwide without the financial burdens and strict schedules of traditional brick and mortar institutions. If courses can emphasize both the soft and technical skills that employers seek and keep students engaged to mitigate traditionally high online learning dropout rates, MOOCs could make a significant contribution to curb youth unemployment. Expand networks virtually. Youth need to be comfortable communicating and sharing their skills online, and employers need to know how to use social media and other digital technology platforms to share information and advertise positions directly to students.

Outsource online tasks to young people. As young people use technology to access jobs in an increasingly competitive online marketplace, online outsourcing will enable companies to curate specific tasks and identify specialized talent to complete them. Encourage young people to pursue digital entrepreneurship.

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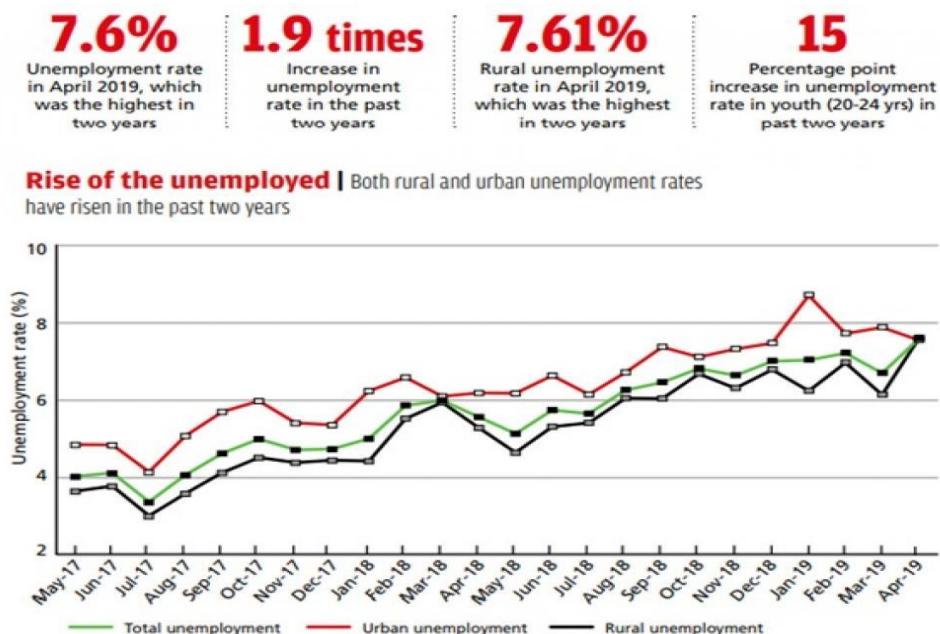
**Keywords:** *Digital technology, National Education Policy, Un-employability*

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### Introduction:

Increase in the share of youth population due to demographic ‘dividend’ or the ‘youth bulge’ seems to be one of the sources of future economic growth in India. Although with increase in school and college enrolment rates, the proportion of youth in the labor force has been declining; their high proportions in the labor force indicate that the problem of youth unemployment would remain a serious policy issue for many more years to come in India.

According to Current Weekly Status (CWS), the rural employment rate is 8.5 per cent whereas the urban rate is 9.6 per cent. The overall unemployment rate is 8.9 per cent. India's rate of unemployment doubled in the past two years, according to the State of India's Environment (SoE) 2019 as per the statistics below. This has particularly affected young graduates.



According to the report, the unemployment rate has gone up from 4% to 7.6% in the last two years (May 2017-April 2019). The unemployment rate in April 2019 was the highest in two years. SoE in the above statistics was released by Delhi-based non-profit Centre for Science and Environment (CSE) on World Environment Day. The data for it has been provided by the Centre for Monitoring Indian Economy (CMIE), New Delhi.

According to SoE, a major cause for high unemployment rates in India is the lack of skills required for jobs that are available. ‘**Un employability**’ is when an individual isn't acceptable for employment by a job provider which **India** is facing. This is worrying because India is a young country, a home to 20% of the world's young population and a major portion of this young workforce, though educated, is unskilled.

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## **Growing Infrastructure A key to Transforming Indian Economy**

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So why do young, educated Indians have poor job skills? One reason is that India has a limited number of quality institutes in spite of growth in the number of higher education providers.

Consequently, getting admission in the prime institutions is an uphill task as they would, naturally, like to maintain a student-faculty ratio that does not impact quality adversely. A large number of self-financed private institutions have mushroomed to cater to the burgeoning demand and lack infrastructure and qualified faculty.

### **Objective or Importance:**

The aim of this paper is to overcome the issues of unemployment in India. The main objectives of this research are as follows.

- ❖ To focus on Technology enabled education system
- ❖ To understand and report the status of using the Digital technology in solving Unemployability problem
- ❖ To increase the access for the employment opportunities for youth through all Online Courses

### **Methodology:**

#### Qualitative method – Case Study:

The work has been accomplished mainly by collection of primary data from extensive field visits. Methodology is the way of achieving the goal through the drawing of inference by observation, collection and differential analysis of relevant data relating to the study of youth unemployment in India.

In order to achieve the aforesaid objectives, the methodology of work has been divided into several phases:

- Collection of secondary data – At first choice of study area, then secondary data was collected from different government and non-government agencies.
- Sample size: Total 100 young unemployed people (including male and female) are interrogated on the basis of questionnaire schedule.
- Collected data was tabulated, calculated, analyzed and represented different statistical and quantitative techniques which are followed by interpretation.

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## **Growing Infrastructure A key to Transforming Indian Economy**

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The key elements in reducing un-employability are:

- ❖ Develop the use of existing community resources and locations, including educational institutions, in order to help offer further free or inexpensive access and training.
- ❖ The media, along with the local authorities and academia, can be a major tool for efficient communication and dissemination.
- ❖ Use of higher level penetration of mobile connection to make information available easily.
- ❖ Educating and preparing the people for the information society and encouraging e-readiness.
- ❖ Supplying information to the public in a language that they understand and are comfortable with, and generally, it is the local language. As, technology is available by which transliteration from English into other languages can be made.
- ❖ Workshops, seminars, and training programs are required to be organized to spread awareness regarding the new technologies in Intuitions in all levels.

### **Results:**

The government can provide digital technological advances during the education of an individual which in-turn can provide the solution for the unemployment problem through Online Courses. Also, we require the involvement of diverse stakeholders such as: multiple government departments at the centre and state levels, private training providers, educational and training institutions, employers, industry associations, assessment and certification bodies and trainees. All these stakeholders need to align their work together in order to achieve the target of reducing un-employability.

### **Conclusion:**

India has a Demographic Dividend which can serve not only our nation but the need of the global economy provided the youth is equipped with modern skills. In this paper, we analyze the un-employability in various contexts (e.g. organizational, societal, local/regional, national) and explore the relationships between these contexts and how these interactions affect the overall results. Improve our current understanding about what scientific paradigms have been used in the monitoring and analysis of policies aimed at reducing un-employability and other related inequalities.



### **References:**

1. Smith J.A., Mc Knight A. and R. Naylor (2000) “Graduate Employability: Policy and Performance in Education in the UK”, Economic Journal, Vol.110, No .6,pp.382-411
2. Lonice Morley (2007) “The x Factor: Employability ,Elitism and Equity in Graduate Recruitment”, 21st Century Society,Vol.2,No.2,pp.191-207.
3. Poornima Jain(2013) Globalization and Developing Employability Skills: Challenges and their Solutions with Reference to NPSD & Government’s Action Plan and role of Life Long Learning and Extension Departments. Journal of Business Management & Social Sciences Research (JBM&SSR) ISSN No: 2319- 5614 Volume 2, No.5, May 2013
4. RubvitaChadha et al (2014) ‘Industry’s Requirement for Employability of Management Student in Present Scenario’ International journal of business quantitative economics and applied management research. ISSN: 2349-5677 Volume 1, Issue 3, August 2014.
5. IAMR, Planning Commission, Govt. of India (2010), The Challenges Facing Skill Development in India: An Issue Paper.
6. <http://www.drrodenglish.blogspot.com>
7. <http://www.knowledgecommission.gov.in> April 2009

**Impact of online learning on school education**

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**Abstract:**

E- Learning is defined as an acquisition of knowledge and skills using electronic technologies such as computer, internet based courseware and local and wide area network. In a society, the student generation has to realize the importance of technology and have to be well aware how to teach the future leaders. With the passage of time, students' number is exploding every year. Annually, the demand for higher education is growing globally and India is no exception to it. In fact, in India, the number of applicants is three to five times as against the number of seats in any institution of higher education. It can be also defined as "Internet based Training (IBT)". Therefore, need arises for such a system, which will help to reach to the maximum number of learners and "e-learning" is the solution for it.

The principal aim of this paper was to provide a summary of current trends in the development of e- learning in India. We know, the traditional classroom education offers the benefit of face-to-face interactions with peers which are typically moderated by a teacher. As students progress to higher classes in school, they seek more autonomy and intellectual freedom. Online learning can help them pursue highly individualized learning programs, possibly even college level courses. They can explore their options by trying out introductory topics from different fields, before committing to a specialization. Online learning programs will also open up opportunities for children from the weaker socio-economic communities who have limited access to learning.

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**Keywords:** *Digital technology, National Education Policy, e-learning*

### **Introduction:**

E-learning is an approach to instruction and learning that utilize information and communication technologies to communicate and collaborate in an educational media. The level and impact of e-learning varies in our life from stage to stage. This paper focuses on the current situation of e-learning in India and its future. Here we also compare the growth rate of e-learning India with respect to other developed countries. Although e-learning has a potential in India, the adaption to this is very slow.

There are basically two parts or phases of e-learning. In one phase e-learning is used for educational purpose and at other level it is been used for training. The educational; use is limited to secondary and higher secondary level. In the second phase it is used to provide training to the employees and to upgrade their skills. E-learning is growing at very low rate in India as compared to international market where it is been used at all levels. In India if we can be able to make e-learning as a source of learning in rural areas then it is the easiest and fastest tool to educate people. If we consider the population in India it is hard to accommodate all the people in specific university or educational area o get the education.

The global eLearning Market is expected to reach \$107 billion by 2015. The global self-paced eLearning market reached \$32.1 billion in revenue in 2010 [3], with a five year compound annual growth rate of approximately 9.2%. This means that the self-paced eLearning market should see estimated revenues of \$49.9 billion in 2015

Top 10 Growth Rates By Country. Growth rate shows how each country adopts eLearning and is a significant indicator since it can reveal revenue opportunities. The growth rate of self-paced eLearning by country is: 1. India: 55% 2. China: 52% 3. Malaysia: 41% 4. Romania: 38% 5. Poland: 28% 6. Czech Republic: 27% 7. Brazil: 26% 8. Indonesia: 25% 9. Colombia: 20% 10. Ukraine: 20%

### **Objective or Importance:**

- ❖ India majority of population is leaving in rural areas so it is bit difficult to make them aware about the concept of e-learning. The problem is to make it available to the rural areas.

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- ❖ The problem of infrastructure, connectivity and internet availability acts as a second role in implementing this. Here, the life styles of people affect all these.
- ❖ The social implication of e-learning can be very important issue to be considered for the success of e-learning in India. The social implication consists of religion, gender, literacy, geographical area, literacy, lifestyle etc.
- ❖ If we consider cultural issues the following factors matters which includes content, style of writing , material used and style of utilization. Some contents may be favourable or unfavourable to some group of people, so we need to take care of this.

We can take these measures to implement the concept of e-learning in rural area where we will be having full utilizations of the system.

### **Methodology:**

#### Qualitative method – Case Study:

The work has been accomplished mainly by collection of primary data from extensive field visits. Methodology is the way of achieving the goal through the drawing of inference by observation, collection and differential analysis of relevant data relating to the study of youth unemployment in India.

- In order to achieve the aforesaid objectives, the methodology of work has been divided into several phases:
- Collection of secondary data – At first choice of study area, the data is collected from selected rural areas.
- Sample size: The selected rural area is interrogated on the basis of questionnaire schedule.
- Collected data was tabulated, calculated, analyzed and represented different statistical and quantitative techniques which are followed by interpretation.

The key elements in providing the awareness on online education system for school children are:

- Develop the use of existing community resources and locations, including educational institutions, in order to help offer further free or inexpensive access and training.
- The media, along with the local authorities and academia, can be a major tool for efficient communication and dissemination.

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## Growing Infrastructure A key to Transforming Indian Economy

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- ❖ Use of higher level penetration of mobile connection to make information available easily.
- ❖ Educating and preparing the people for the information society and encouraging e-readiness.
- ❖ Supplying information to the public in a language that they understand and are comfortable with, and generally, it is the local language. As, technology is available by which transliteration from English into other languages can be made.
- ❖ Workshops, seminars, and training programs are required to be organized to spread awareness regarding the new technologies in Intuitions in all levels.

### Benefits of e-learning:



### Results:

E-learning has a major role to play in India to grow up in all aspects in international market. As India is one of the leading IT service provider countries. The presence of world class IT infrastructure and IT professionals enable it to be one of the leading e- learning service providers in India. The government is taking proactive measures in regulatory and financial capacity to boost the e-learning environment in India.

Already lots of funds are being invested in setting up internet kiosks in rural areas for the purpose of communication which can be used for e-learning purpose.

The influence of technology on children and education has been immense and this led to huge mobile app development in this sector. Children and teenagers are now inseparable from their smart phones and other such electronic gadgets. This has become a huge concern for the teachers and parents and they are worried if this can have a detrimental effect on the studies of their children

### **Conclusion:**

The principal aim of this paper was to provide a summary of current trends in the development of e- learning in India. Unquestionably, e-learning will continue to grow in our organizations. In anticipation of this growth, the governments, business companies and professional associations can start focusing on applications and the effective and efficient implementation of e-learning. By recognizing that e-learning truly is a methodology, one can experience the greatest benefits that e-learning has to offer now and in the future. In the end, the fact remains that, with respect to e-learning, poor quality procurement practices (in all sectors but especially in the public sector) are a barrier to growth and adoption. So it is necessary to make a thorough evaluation when it comes to choose e-learning software for education in order to improve the knowledge of learners, the learning outcomes, the performance outcomes, the business and policy impact and in order to value the money spent.

### **References:**

1. Mark W. Brodsky – “E-Learning Trends Today and Beyond”, May 2003
2. Consuelo L. Waight, Pedro A. Willging, Tim L. Wentling – “Recurrent Themes in E-Learning: A Meta- Analysis of Major E-Learning Reports”
3. Jane Massy – “Study of the e-learning suppliers’ “market” in Europe”
4. Advanced Distributed Learning (ADL), Sharable Content Object Reference Model (SCORM®) 2004 2nd Edition Overview, 2004
5. eLearning Trends in India: Facts , figures and the Figure
6. <http://confluence.ias.ac.in/technology-in-the-dnep-and-science-education/>
7. <https://www.romper.com/p/9-best-science-apps-for-kids-thatll-make-you-want-to-offer-them-even-more-screen-time-8767661>
8. <https://www.educationworld.in/impact-of-online-learning-on-school-education/>
9. [https://study.com/articles/How\\_Mobile\\_Apps\\_and\\_Devices\\_Impact\\_Teaching\\_and\\_Learning\\_EduMOOC\\_2011.html](https://study.com/articles/How_Mobile_Apps_and_Devices_Impact_Teaching_and_Learning_EduMOOC_2011.html)
10. <https://www.educationcorner.com/learning-apps-helping-hurting-education.html>

**Excavate the extensive of non- performing assets- a study with reference to  
state bank of India [sbi]**

Roopa Shree.N, Soundarya.S

M.com 2<sup>nd</sup> year

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**ABSTRACT**

Any asset which stops giving returns to its investors for a specified period of time is known as non performing assets. Indian banking industry is seriously affected by non performing asset more than 729388 corer worth loans are classified as nonperforming loan in India.

Moving forward, while the pandemic and some of the associated policy measures could reverse the recent downward trends in nonperforming asset temporarily, more durable policy initiatives like bankruptcy to make significant positive changes in the non performing assets play an important role in mobilization and allocation of resources for the growth of the Indian economy. This part suggests a few unique ways to tackle the problem further emphasizing why the banks need to look into the crisis for ensuring the smooth functioning of the infrastructure.

One of the biggest difficulties in the non performing assets of a bank, to grant loan is not a big challenge but the recovery that loan is one of the biggest issues. The purpose of this article is an attempt to analyze the trends of nonperforming assets on the banking sector especially considering the State Bank of India.

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**KEYWORDS:** *Gross advance, Economic development, Bank, Non performing asset*

### **INTRODUCTION**

The economic reforms initiated by the then finance minister and former Prime Minister of India Dr. Manmohan Singh would have been remained incomplete without the overhaul of Indian banking sector, the important aspect of norms and guidelines for making the whole sector vibrant. The problem of losses and lower profitability of NPA and liability mismatch in banks and financial sector depend on how various risks are managed in their business. Non-Performing Assets (NPAs) are the smoking gun threatening the very stability of Indian banks. In a bid to stem the lurking rot, RBI issued in 1993 guidelines based on recommendations of the Narasimham Committee that mandated identification and reduction of NPAs. Their implementation immediately pushed many banks into the red. So serious is the problem that an RBI report suggested that reducing NPAs be treated as a “National Priority”. According to the concept of Non-Performing Assets in banks are those assets, which cease to generate income for the banks and remain irregular due to non payment of interest and principal amount. In the milieu of the complex changes when the dilemma of banks NPA was gradually recognized for the first time at its peak velocity, in 1992-93 there was resultant uproar and confusion.

Controlling the growing NPAs becomes a challenging task in Indian economic scenario. It affects the liquidity, profitability, and equity. This present paper is designed to examine the existing position of banks in respect of non-Performing Assets, ascertain the causes of the problem and its remedial measures. Economy may be defined as aggregation of goods and services and supply of money Government has to facilitate credit facilities. Proper system of credit facilities boosts production which results in economic growth. To build up such credit environment, banking sector plays a vital role. In order to carry on the smooth functioning of the economy, banks should have sufficient funds to lend the money to the industry; and borrowers should repay on timely basis. Banks get impacted when the credits provided by banks are not returned due to nonpayment of debts and its interest, which is technically termed as non performing assets. Due to which there is a limitation of available funds for investors as well as there will be a loss of assets for the banks which will have negative impact on the economy. Banking sector faces all time, the fear of NPAs on part of borrowers.

State Bank of India (SBI) is an Indian Multinational, Public Sector Banking and financial services. It is statutory and is headquartered in Mumbai. The origin of the State Bank of India



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goes back to the first decade of the nineteenth century with the establishment of the Bank of Calcutta in Calcutta on 2 June 1806. The rich SBI history and legacy of over 200 years, empowers SBI as the most trusted bank by Indians through generations. SBI is the largest bank in India which serves over 44 Corer customers of our nation.

### RESEARCH METHODOLOGY

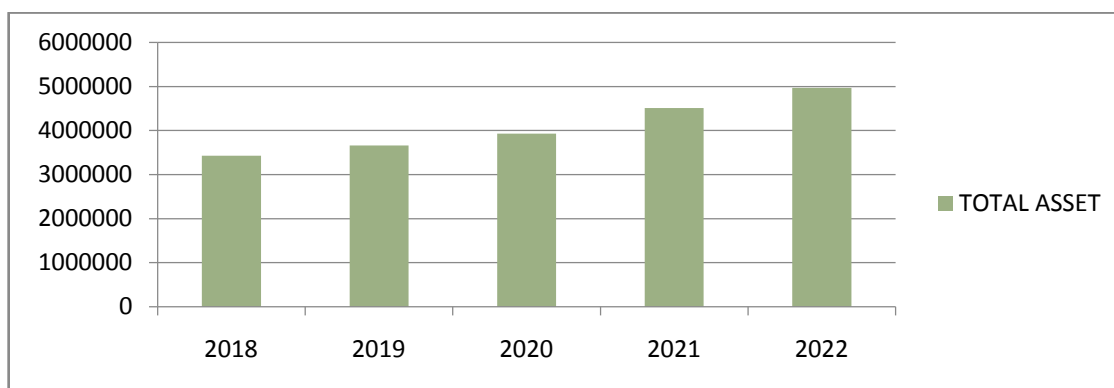
The current study uses an explorative approach to understand, discuss and bring out the issue relevant to the title. The study is primarily analytical and descriptive based on secondary data collected from RBI Publications, journals, reports and websites of State Bank of India. Articles from The Economic Times, information from e-journals turned out to be extremely informative for the purpose of the study. The time period covered for the study is from 2018 to 2022. To analyze the growth in NPAs among State Bank of India, different statistical tools like figures, bar graphs have been used.

### ANALYSIS AND INTERPRETATION

TABLE 1

TOTAL ASSET OF SBI (IN CRORES)	
YEAR	TOTAL ASSETS
2018	34,29,904.01
2019	36,56,260.31
2020	39,27,631.25
2021	45,10,852.28
2022	49,64,219.53

Source: Moneycontrol.com/ Annual report of SBI



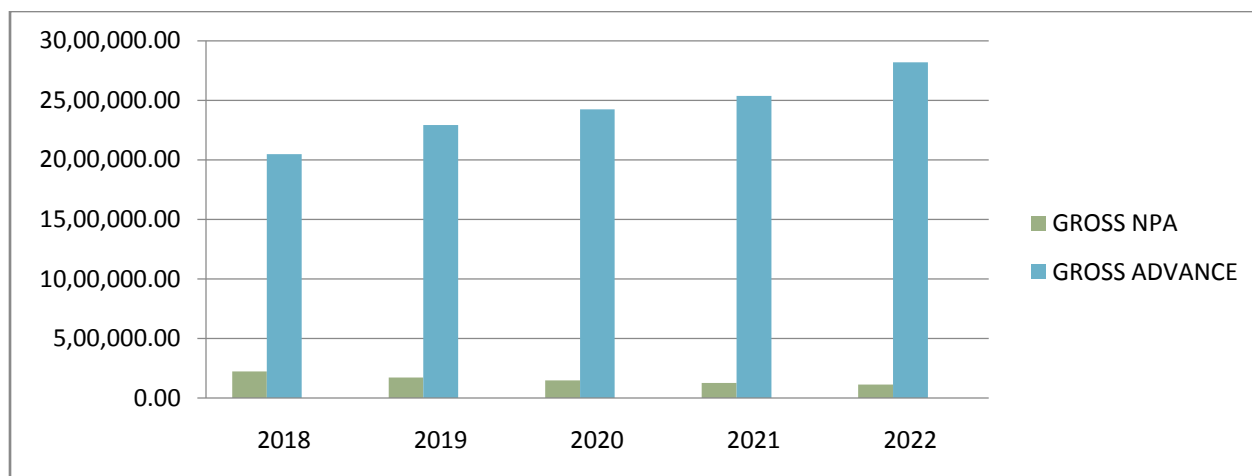
### INTERPRETATION

Above graph show that total asset of SBI bank is increased in 2018 by 34, 29,904.01 corers, in 2022 increased by 4964219.53 corers. It has been observed that the assets of the SBI increased in the last five years.

**TABLE 2**

GROSS NPA OF SBI (IN CRORES)			
YEAR	GROSS NPA	GROSS ADVANCE	GROSS NPA RATIO
2018	2,23,427.00	2047914	10.91
2019	1,72,750.00	2294205	7.53
2020	1,49,091.00	2424258	6.15
2021	1,26,389.00	2537932	4.98
2022	1,12,023.00	28,18,671	3.97

**Source:** Moneycontrol.com/Annual report of SBI



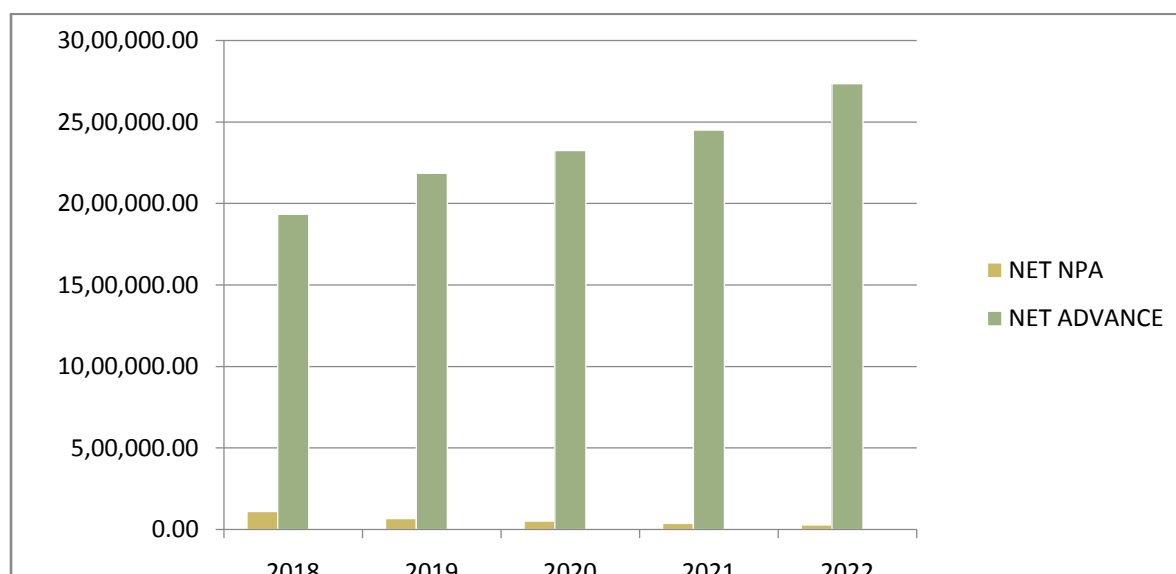
### INTERPRETATION

The above table shows the gross NPA to total gross advances ratio of SBI. It shows that gross NPA ratio in 2018 was 10.91% then decreased every year and finally reached in 2022 is 3.97%. It is evidence that SBI have taken measures and followed the rules and maintained gross NPA in SBI Bank.

**TABLE 3**

<b>NET NPA OF SBI (IN CRORES)</b>			
<b>YEAR</b>	<b>NET NPA</b>	<b>NET ADVANCE</b>	<b>NET NPA RATIO</b>
2018	1,10,854.70	19,34,880.19	5.73
2019	65,894.74	21,85,876.92	3.01
2020	51,871.30	23,25,289.56	2.23
2021	36,809.72	24,49,497.79	1.50
2022	27,965.71	27,33,966.59	1.02

**SOURCE:** Moneycontrol.com/ Annual report of SBI



## **INTERPRETATION**

The above graph presents the NPA ratio of SBI bank. It can be noticed the net NPA ratio was increased in 2018 and decreased by 1.02 in 2022. The bank had maintained the NPA and loans recovery till March 2022. The net advance is increased year by year but the net NPA is decreased continuously.

## **OBJECTIVES**

1. To find out the reason behind the highest amount of NPA in SBI
2. To make proposals for reducing NPA in economic growth

### CONCEPT OF NON PERFORMING ASET (NPA)

Non Performing Asset is defined as, if a any interest and principal of an account (loan or advance) remains overdue for more than 90 days than it is termed as Non Performing Asset.

Banks are required to classify

NPA is classified into Standard, Sub-Standard, Doubtful and loss assets, based on the following criteria stipulated by RBI:

1. **Standard Assets:** Standard assets are one which does not disclose any problems and which does not carry more than normal risk attached to the business.
2. **Sub standard assets:** A sub standard asset is on which has been NPA for a period not exceeding 12 months.
3. **Doubtful Assets:** A doubtful asset is one which has been NPA for more than 12 months.
4. **Loss Assets:** A loss assets is one where the loss has been identified by the bank, through the internal or external auditor or by the central bank inspectors. The amount has been written off, wholly or partly even after 3 years.

### IMPACT OF NPA ON BANKS AND ECONOMY

1. **Profitability-**NPA denotes the money which gets trapped in terms of bad assets which occurs because the bank took a wrong decision and lends money to a defaulter which means loss of profit of the bank by the amount of NPA. The ROI also declines due to a decrease in profitability which adversely affects the current earning of the bank.
2. **Public's confidence-** If a bank is facing the problem of high NPAs, then it adversely affects the value of the bank in terms of the market for credit. The goodwill, brand image of the bank gets hampered due to NPA leading to a negative impact on people who are putting their money in the banks.
3. **Additional cost-** As an after effect of NPA, banks have to face liquidity issues and in order to keep them operational they have to borrow capital on which they are required to pay interest leading to an additional burden on the bank. The time and efforts of management are some indirect costs that banks have to bear which could have been invested.

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4. **Asset (credit) contraction-** The increased NPAs are also one of the reasons for an economic slowdown as it adversely impacts the recycling of funds and reduces the ability of banks for lending more and thus results in lesser interest income which contracts the money stock leading to an economic slowdown.
5. **Reduction in interest rates-** Due to the high amount of NPAs bank tend to reduce the rate of interest in saving rates to increase margin which makes very difficult for banks to survive as many other investment instruments like PPF, Mutual funds which offer higher rates of interest so people tend to shift investing from the banking sector to the non-banking sector which erodes the capital with the banks.

### **HOW CAN WE PREVENT AND TACKLE THE NPAs?**

1. The enactment of the insolvency and Bankruptcy Code (IBC) in 2016 has been an important step towards recovering the NPAs as the resolution process has become quick and efficient and the lenders can now more easily recover the NPAs from the defaulters.
2. Bank should be equipped with the latest credit risk management techniques to protect the bank funds and minimize insolvency risks the banks should also do proper credit risk management which involves credit appraisal analysis as proper evaluation of the loan application may help in detecting the unviable projects .
3. A separate monitoring department should be established for periodical review of accounts, comparative risk analysis and compliance of terms and conditions of sanction.
4. Banks should be given more power to recover the NPAs from the defaulters rather than playing the game of “wait and watch”. Also, alternative dispute resolution mechanisms like LokAdalats and Debt Recovery Tribunals should be used for faster settlement of dues.
5. The senior –level executives who take the major decisions should be held accountable, not the lower-level executives, for issuing loans, which later turn out to be a NPA, without conducting a proper analysis.

### **COVID- 19 PANDEMIC – EFFECT ON NPAs**

RBI regularly publishes the data on NPAs as a part of its financial stability reports. Most recently in July, 2020 , RBI in its latest Stability Report said bank NPAs may touch 22 year high in severe –stress scenario due to the impact of Covid -19 pandemic. It added to expect COVID-19 to crèches Gross Non-performing assets (GNPA) ratio of all scheduled commercial banks (SCBs)

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may increase from 8.5% in March 2020 to 12.5% by March 2021. The GNPA ratio may also worsen to as highest 14.7% by the end of the current financial year, if the adverse economic impact of the Covid-19 pandemic would be very severe.

According to RBI Report, at least 5% of the moratorium loans could turn into NPA if Covid-19 impact persists in the economy. In the wake of Covid-19, the RBI had announced a six months loan moratorium to all term loans. The moratorium was first given for March –May (2020) but was later extended to June- August (2020). The Covid-19 lockdown has a significant impact on all industrial activities in the economy resulting in major income loss. This has impacted their loan repayment ability. This may lead to Gross Domestic Productive. Rs 4-6.2 lakh Crore fresh gross NPAs. The RBI warned that (GDP) contraction by 8.9% in 2020-21.

### **CONCLUSION**

Non – performing assets are a huge burden on the Indian Banking Sector as it is directly impacting the profitability of the banks. An economy cannot grow without the support of a healthy banking sector. This situation can be improved by rewriting the traditional banking model by way of innovation and the adoption of modern technologies. Thus, it is imperative for the RBI, Government, and all the banks to ensure that a proper mechanism is built to tackle the NPAs otherwise these NPAs will keep increasing further continuing to adversely impact the other sectors as well.

### **REFERANCES**

1. <https://www.sbi.co.in/>
2. <https://www.moneycontrol.com/financials/statebankofindia/results/yearly/SBI/2#SBI>
3. NON-PERFORMING ASSETS (NPAs)-HOW TO CONVERT INTO PERFORMING ASSETS AND SUPPORT THE ECONOMIC GROWTH(2020) Dr.Binoy Joy Kattadiyil and Dr.MrutyunjaySisugoswam
4. <https://www.ijser.org/researchpaper/Trend-of-Non-Performing-Assets-Analysis-of-State-Bank-of-India.pdf>
5. <https://garph.co.uk/IJARMSS/Aug2017/8.pdf>
6. UNEARTHING THE EPIDEMIC OF NON-PER FORMING ASSETS -A STUDY WITH REFERENCE TO PUBLIC SECTOR BANKS IN INDIA(2011) by DR.HOSMANI.A.P; MR.JAGADISH HUDAGI

**A CONCEPTUAL STUDY ON CREDIT LENDING SCHEMES IN MSME  
FOR AN INDIAN ECONOMY**

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**ABSTARCT**

The ministry of Micro, Small and Medium Enterprises, a branch of the Government of India, is the apex executive body for the formulation and administration of rules and laws relating to MSME in India. As the MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & urban areas, and also helps to reducing regional imbalances, assuring more equitable distribution of national income. As the paper studies the MSME sectors credit lending schemes and the impacts of the MSME for providing support to existing enterprises and encouraging creation of new enterprises.

It also includes how the MSME Act seeks to facilitate the development of these enterprises as also enhance their competitiveness. Based on the findings of the study data collected through only on secondary data related to MSME credit lending facilities available for the enterprises and interest and preference of each individual. Finally, this paper concludes by discussing suggestions and recommendations that could be addressed in the future studies.

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**KEY WORDS:** *MSME, Credit Facility, Government, Economic Development.*

### **INTRODUCTION**

Micro, Small and Medium Enterprises (MSME) sector is a very important sector of the Indian Economy. MSMEs is not only involved in the activities of providing small or large employment opportunities but also helps in the development of rural and urban areas as it reduces regional imbalances, assuring equal distribution of national income and wealth. Micro, Small and Medium Enterprises is controlled by the Government of India and it is the executive body for the administration and management of rules, regulations and laws relating to micro, small and medium enterprises in India. This is an apex body with various schemes which concentrates the entrepreneurship and new ideas for the sustainable development of the sector.

The MSME includes some many sectors and one of the sectors is Khadi and Village Industries (KVI) is two national heritages of India as Khadi is the legacy of the father of the nation. The Khadi and Village Industries (KVI) creates an employment opportunity at very low capital investment as it serves the basic needs of processed goods and provides sustainable development to rural artisans. The Khadi and Village Industries now represent a heritage product, which is ethnic as well as ethical. It is also established under the Khadi and village Industries Commission Act 1956. The main functions is to plan, organize and implement the projects, schemes for the sustainable developments of the Indian Economy as it also undertakes the activities like research and developments, technology , marketing, skill improvements etc.

The second is the Coir sector is an agro-based industry which is originated in the state of coconut producing states like Kerala, Tamil Nadu, Andhra Pradesh, Tripura, Assam etc. It is majorly based on export industry and also export of diversified products like Coir Geotextiles etc. It is a statutory body established under the Coir Board Industry Act, 1953. The Coir Board Industry includes technological and economic research and development activities, internal consumption of coir and coir products, developing new products and designs. The major strengths of the coir industry are it being export oriented and generating wealth out of the waste (coconut husk).

The MSMEs Khadi and Village Industries and Coir Industry constitute a dynamic sector for the sustainable development of the Indian Economy in terms of creating employment opportunities, manufacturing, production, exports and entrepreneurial opportunities. In order to promote this the Government of India has established the Ministry of Small-Scale Industries and Agro and Rural Industries (SSI and ARI) in October 1999 to formulate the project, schemes, policies etc.



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In September 2001, Small Scale Industries and Agro and Rural Industries were bifurcated into two separate Ministries. Then as per the Government of India Rules 1961, the Honorable President has notified the Micro, Small & Medium Enterprises Development (MSMED) Act in 2006 as it provides the recognition of the concept of enterprises which includes both manufacturing and service entities. It defines the three tiers of these enterprises namely, micro, small and medium.

The Ministry of Small-Scale Industries and the Ministry of Agro and Rural Industries were combined and given the name "Ministry of Micro, Small and Medium Enterprises" on May 9, 2007, as a result of a change to the Government of India Rules 1961. The primary responsibilities of the MSMEs are of the State Governments.

The role of the MSME is to encourage entrepreneurship and opportunities for livelihood and enhance the competitiveness of MSME which is assisted by the State Government. The policies/schemes/Programme controlled by the MSME Ministry, and its organizations seeks to provide adequate flow of credit from financial institution/banks, supports for technology, skills up gradation, support for product development, assist for better export market measures to promote capacity-building and empowerment of units.

MSME defined in India as “The Micro, Small and Medium Enterprises Development Act, 2006” of Government of India. According to the act MSMEs have been classified in terms of sector and investment in plant & machinery for manufacturing sector and investment in equipment in case of service sector as under (Revised Classification applicable W .e. f 1<sup>st</sup> July 2020)

<b>Classification</b>	<b>Micro</b>	<b>Small</b>	<b>Medium</b>
Manufacturing Enterprises and Enterprises rendering Services	Investment in Plant and Machinery or Equipment: Less than Rs.1 crore and Annual Turnover; Less than Rs. 5 crores	Investment in Plant and Machinery or Equipment: Less than Rs.10 crore and Annual Turnover; Less than Rs. 50 crores	Investment in Plant and Machinery or Equipment: Less than Rs.50 crore and Annual Turnover; Less than Rs. 250 crores

### **REVIEW OF LITERATURE**

#### **I. ENTREPRENEURIAL STRATEGIES OF MSME FOR THE SUSTAINABLE DEVELOPMENT IN INDIA (2019) – A. Sathish, Dr. S. Rajamohan.**

This paper is focused on the Ministry of Micro, Small & Medium Enterprises strategically designed policies, schemes, rules, regulations, and facilities provided for the skill development with the view of assisting for the sustainable development for the entrepreneurs. This includes the identification of the strategies and initiative offered by MSME to promote the entrepreneurship in India. This paper also includes the opportunities, strategies adopted by the Government to promote the entrepreneurship in India.

#### **II. ROLE OF MICRO, SMALL AND MEDIUM ENTREPRISES (MSMES) IN ACHIEVING SUSTAINABLE DEVELOPMENT GOALS (2019) – Dr. D. K. Nema**

This paper studies the key elements of the sustainable development of the Indian Economy as this discusses that MSMEs are considered as nurseries for innovation and entrepreneurship around the globe. This paper also studies the role of MSMEs in achieving the sustainable development goals as this is considered an important pillar as the MSME is underscored by its theme “ MSMEs ‘Small Businesses, Big Impact’”.

#### **III. CONSTRUCTS AND CONSTRAINTS OF MSME IN INDIA FOR SUSTAINABLE DEVELOPMENT (2015) – Dr. Nitya Sharma**

This research paper concentrates to studies the various constructs and constraints of MSME for the sustainable development in Punjab. This paper aims on debating the issues of MSMEs sustainability; this research studies the contribution of MSMEs to the Indian Economy, that the MSMEs are critical to growth and economic indicators of national economy. As these paper focuses on the key role in the development of the Indian economies with their efficient, effective, innovative, and flexible entrepreneurial spirit that is adopted by the Government.

#### **IV. IMPACT OF SUSTAINABLE FINANCE ON MSMEs AND OTHER COMPANIES TO PROMOTE GREEN GROWTH AND SUSTAINABLE DEVELOPMENT (2022) – Mahesh. K. M, P. S. Aithal& Sharma K.R.S**

This paper studies the sustainable finance that contributes for the better development of the Indian Economy and for the economic growth. SIDBI, NITI Aayog and world bank facilitates sustainable finance to encourage all kinds of businesses to grow from Small, Medium Enterprises

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to Large Enterprises to make a global impact. This paper also studies the sustainable finance as financial instrument to fight climate change and its impact by regulating emissions and promoting developments in renewable energy and sustainable development towards ESG-Environmental, Social and Governance. This research paper also studies that the Sustainable development is a concerted effort towards building an inclusive, sustainable, and resilient future for people and the planet has three core elements (i) Economic Growth, (ii) Social inclusion and (iii) Environment protection.

### **V. MICRO SMALL AND MEDIUM ENTERPRISES (MSME) AND ECONOMIC DEVELOPMENT OF ODISHA (2010) – Krupasindh Pradhan, Santhosh Kumar Munda**

This paper focuses on the sustainable development that is largely depended on MSME rather than on big industrial hubs. Sustainable development on MSME of an Indian Economy not only depends on large scale organizations but also equally depends on small and medium scale enterprises. As the MSME plays a vital role in the process of economic development. It generates employment opportunities at low cost and even helps the society to move the path of prosperities and economic growth.

### **OBJECTIVES OF THE STUDY**

- To study the different schemes on the MSME for the sustainable development.
- To study the impact of credit lending schemes provided by the Government on MSME.

### **METHODOLOGY**

This paper is based on secondary data and descriptive in nature and in order to examine the Micro, Small & Medium Enterprise credit lending facilities to promote the entrepreneurship for the sustainable development of India. The research is collected through purely based on secondary data.

The Secondary Information available with the respective organizations and collected on database, scholarly website like Google scholars, research gate etc, and the government website of the MSME. Apart from that, various research papers published in related articles, magazines and journals have been used.

**SCHEMES OF THE MSME FOR THE SUSTAINABLE EMPLOYMENT OPPORTUNITIES ARE AS FOLLOW:**

**1) Prime Minister’s Employment Generation Programme (PMEGP):**

This programme intends to offer financial assistance in creating long-term employment opportunities in both urban and rural locations.

Bank loans with money margin subsidies are available for projects costing up to Rs. 50 lakhs in manufacturing and Rs. 20 lakhs in services.

Funds allocated during FY 2021-22 - Rs.2500.00 Corer.

Expenditure incurred (up to 31.12.2021) - Rs.1785.00 Corer.

<b>Year</b>	<b>Margin Money Disbursed (Rs. Crore)</b>	<b>Micro Units Assisted (Number)</b>	<b>Estimated Employment Generated (Number)</b>
2018-19	2070.00	73,427	5,87,416
2019-20	1950.82	66,653	5,33,224
2020-21	2188.80	74,415	5,95,320
2021-22	1633.48	52,994	4,23,952

**Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE):**

This programme aims to promote MSMEs without collateral by providing credit guarantee support for first-generation entrepreneurs. Credit guarantee without collateral and third-party guarantee for loans up to Rs. 2 corers. Fund Allocation (2021-22). NIL as approved corpus of Rs.7, 500 corers already been achieved expenditure incurred (up to December 2021) - Corpus of Rs. 7,500 corers already been achieved. As on 31<sup>st</sup> December 2021, cumulatively 56.03 lakh proposals s have been approved for guarantee cover of Rs. 2.90 lakh cores.

**Micro & Small Enterprises Cluster Development Programme (MSE – CDP) Scheme:**

This Scheme is to support the sustainability and growth by addressing common issues such as improvement of technology, quality, market access, etc. This scheme also focuses on upgrading infrastructural facilities in the new/existing industrial areas/Clusters of MSMEs.

Creation of common facility centres like creation of tangible assets as Common Production/ Processing Centre, Design Centres etc.,

The Government of India will be restricted to 60% of the cost of Project Rs.10.00 corer for Industrial Estate & Rs.15.00 corer for Flatted Factory Complex.

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Year	Projects Approved	Projects Completed	Budget utilized Expenditure (Rs. in Crore)
2018-19	36	28	172.73
2019-20	74	22	226.339
2020-21	68	20	116.28
2021-22 (as on 31.12.21)	19	5	68.31

### **Scheme of Fund for Regeneration of Traditional Industries (SFURTI):**

Increasing production to make goods competitive is the goal of this scheme, which aims to promote traditional industries and artisans working in collectives.

Due to the fact that this programme offers financial support of up to Rs. 2.5 Corer for up to 500 artisans and Rs. 5 Corer for 500 people more than artisans.

The plan aims to organise established industries and develop cutting-edge products, better technology, and sophisticated procedures. This scheme will cover three types of interventions:

- Soft Interventions – Activities to increase awareness, counselling, the development of skills and capacity, etc., are included.
- Hard Interventions - Establishing raw material banks, common facility centres, upgrading industrial infrastructure, etc.
- Thematic Interventions – cross-cutting interventions for brand building.

The financial assistance provided for any specific project will be to a maximum of Rs. 5 Crore to support all Interventions

Type of Cluster	Per Cluster Budget limit
Regular Cluster(up to 500 artisans)	Rs. 2.50 corer
Major Cluster (more than 500 artisans)	Rs. 5.00 corer

### **Entrepreneurship and Skill Development Programme (ESDP) Scheme:**

This scheme encourages new enterprises, capacity building of existing MSMEs and inculcating entrepreneurial culture in the country. Widen the base of entrepreneurship by development achievement, motivation and entrepreneurial skill to the different sections of the society. The ultimate objective is to promote new enterprises, build capacity of existing MSMEs and inculcate entrepreneurial culture in the country.

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Programs/Beneficiaries FY 2021-22 (up to 31.12.2021)

Total No. of Programmes Completed under ESDP	No. of Beneficiaries under ESDP
315	15599

Fund Allocation (2021-22) - Rs. 10.00 corer

Expenditure incurred (up to 31.12.2021) - Rs. 1.83 Corer

### **A Scheme for Promotion of Innovation, Rural Industries & Entrepreneurship (ASPIRE):**

The Scheme facilitate and encourage an innovative business and creates new jobs, reduce unemployment by this entrepreneurship culture will develop in India and this scheme also strengthens the innovative business for the competitiveness of the MSME Sector. The scheme has the objectives to facilitate business solution for unmet social needs and promote innovative businesses to strengthen the competitiveness of MSME Sector.

The Scheme components are create a database of technologies and setup a Network of Technology Centres for sharing of best practices and experience, develop the required skilled Human Resources, Set up Livelihood Business Incubators to provide skill training etc. Funds allocated (2021-22) - Rs 15 corer. Expenditure Incurred 2021-22 (till 31.12.21) - Rs. 4.31 corer

### **COIR BOARD**

Coir Board is a Statutory Body established under the Coir Industry Act, 1953 for promoting the overall development of coir industry including export promotion of Coir & Coir products. India produces more than 80% of the world's coir fibre, making it the largest coir producer in the world. The best examples of Coir are beautiful antiques, handicrafts, and useful items made from coconut husks, which are otherwise a waste. The coir industry employs about 7.37 lakh persons of whom majority are from rural areas belonging to the economically weaker sections of the society. Nearly 80% of the coir workers in the fibre extraction and spinning sectors are women.

### **Coir Industry in India**

Coir is a coarse fibre extracted from husk, the fibrous outer shell of coconut. Since ancient times, coconut fibre has been used to make ropes and cordage. The goal is to increase exports by adding value through technological innovations. It is mostly based on export-oriented industries.

Growth in production of coir products during 2018-19 to 2021-2022 (Provisional as on 31<sup>st</sup>, December 2021)

<b>Item</b>	<b>2018-19 (Qty in MT)</b>	<b>2019-20 (Qty in MT)</b>	<b>2020-21 (Qty in MT)</b>	<b>2021-22 (Qty in MT)</b>
Coir fibre	7,49,600	7,41,000	7,58,000	5,72,800
Coir yarn	4,49,800	4,46,000	4,56,000	3,44,600
Coir products	2,96,800	2,94,200	3,00,800	2,27,300
Coir Rope	90,000	89,200	91,200	68,900
Curled Coir	89,900	88,800	90,800	68,600
Rubberized coir	1,19,900	1,08,500	1,10,400	83,000

**Coir Vikas Yojana – Umbrella Scheme**

**Skill Up gradation and Mahila Coir Yojana**

Impart training in processing of coir and value addition to potential workers, coir artisans/entrepreneurs through field centres and training institution of Coir Board and it provides self-employment opportunities to rural artisans including women artisans in regions processing coconut husk. The Major benefit from this scheme is to personally trained in the cadres of supervisors/artisans in coir industry

**Budgetary support by the MSME to Coir Board**

The Coir Board receives funding from the Indian government to carry out its many plans and non-plan activities. The details of budgetary support provided to Coir Board during the last five years and the current financial year is given below. Budgetary support to the Coir Board.

<b>Year</b>	<b>Allocation</b>	<b>Funds Released</b>
2017-18	70.50	58.89
2018-19	86.23	82.03
2019-20	75.70	73.00
2020-21	80.70	80.69
2021-22(BE)	80.00	52.02*

**The National Small Industries Corporation (NSIC) Limited**

Under the Ministry of Micro, Small and Medium Enterprises, the National Small Industries Corporation Ltd (NSIC) is a Government of India enterprise. The NSIC has been working to support the development of the nation's Micro, Small, and Medium Enterprises.

"To promote and support Micro, Small and Medium Enterprises by offering integrated support services including, Marketing, Finance, Technology and other Services," is the stated objective of NSIC. "To be a premier organisation encouraging the growth of Micro, Small, and Medium Enterprises in the country," reads the mission statement of NSIC.

### **Impacts on Credit Lending Schemes on MSME Sector are as follows:**

➤ **Multiple Effect in Specified Sector & Investments increased on MSME Sectors:**

The definition of an MSME has been updated by the government to include a larger portion of the health industry. The PM Atma Nirbhar Swasth Bharat Yojana would give the MSMEs that are primarily engaged in health-related activities a boost.

Under the Mega Investment Textile Parks project, the government has proposed building seven textile parks around the nation.

The MSME Sector will experience sustainable growth and a long-term positive impact as a result of increased capital expenditure and infrastructure spending.

**1) Enhanced Competitiveness:**

For the sustainable growth of the Indian economy, the MSME sectors have increased the competitiveness of all goods and services. The MSME sector will gain from the full rationalization of customs tariffs on steel screws, plastic building products, prawn feed, finished gem stones, and duty-free commodities to encourage the export of apparel, leather goods, and handicrafts. The MSME sector's ability to compete on pricing in the export market would also be aided by the rationalization of levies on the raw materials used in textile manufacture. The necessary incentive for MSMEs operating in this area will be provided by the rationalization of customs duty on gold and silver.

**2) Increased in Budgetary Outlay:**

The budget allocation for MSME has increased by two times during the fiscal year 2021–22, from Rs. 7572 corers in 2020–21 to Rs. 15700 corers.

A big relief for the industry is the Rs. 10,000 crore corpus for the issue of a guarantee for borrowings.

**3) Regulatory Initiatives:**

Limit for Tax Audit increased from Rs. 5 crores to Rs. 10 crores, relieving a significant portion of MSMEs from the burden of compliance. Instead of the previous 6 years, the time period for reopening an IT assessment is now 3 years. The case may be reopened for a maximum of 10 years only in cases of substantial tax evasion (over Rs 50 Lakh). In the event of previous assessments, this will promote certainty for small industries and reduce litigation.



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For small taxpayers with taxable incomes up to \$50,000 and any challenged incomes up to \$100,000, there is a Faceless Dispute Resolution Committee. By resolving the matter at the outset, this will lessen ongoing litigation and stop new disputes.

#### **4) Training and Skill Development:**

One of the key elements for the continuous success of MSMEs is a skilled and trained labour force. The National Apprenticeship Training Scheme (NATS) will be reorganized to provide post-education apprenticeships, graduate and diploma engineering training, and other services that will meet the workforce needs of the MSME manufacturing sector.

#### **5) Other Impacts:**

Additionally, the government has launched a number of programmes under the Aatma Nirbhar Bharat Abhiyan to assist the MSME sector in the nation, particularly during the Covid-19 outbreak. Some of them include I Subordinate Debt for MSMEs of Rs 20,000 corer.

ii) Collateral-free automatic loans for businesses, including MSMEs, in the amount of Rs 3 lakh corers.

iii) Newly updated standards for classifying MSMEs.

iv) New MSMEs Registration through "Udyam Registration" for Easy Dong Business.

v) No international bids for purchases under 200 corers of rupees

## **CONCLUSION**

Numerous steps have been done in recent years to improve the ecosystem of Micro, Small, and Medium-Sized Enterprises through the improvement of plans, policies, programmes, and the redress of grievances in order to promote sustainable growth. The government further increased and improved "Ease of Doing Business" in order to fulfill its commitment to "Ease of Living" in India. The government has already taken a number of actions, and governments are moving toward a conditional relaxation of the lockdown in particular areas. The government has implemented some flexible policy frameworks to meet several eventualities and can priorities its various steps under each of the scenarios, even though the ministry is probably moving in the correct route. This plans or framework will include short-term, medium-term, and long-term objectives.

### REFERENCES

- <file:///D:/Research%20Paper/MSME%201.pdf>
- [https://www.google.com/search?q=google+scholar&rlz=1C1GCEU\\_enIN887IN887&oq=google+&aqs=chrome.1.69i57j69i5912j0i27112j69i6013.3676j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=google+scholar&rlz=1C1GCEU_enIN887IN887&oq=google+&aqs=chrome.1.69i57j69i5912j0i27112j69i6013.3676j0j7&sourceid=chrome&ie=UTF-8)
- [https://www.google.com/search?q=research+papers&rlz=1C1GCEU\\_enIN887IN887&sxsrf=ALiCzsY5RG6JcOaMZlxRA\\_Vd2eRQQ-af6g%3A1659896055655&ei=9wDwYpHLJ\\_Xv4-EP9Pe62Ao](https://www.google.com/search?q=research+papers&rlz=1C1GCEU_enIN887IN887&sxsrf=ALiCzsY5RG6JcOaMZlxRA_Vd2eRQQ-af6g%3A1659896055655&ei=9wDwYpHLJ_Xv4-EP9Pe62Ao)
- <file:///D:/Research%20Paper/MSMEENGLISHANNUALREPORT2021-22.pdf>
- [file:///D:/Research%20Paper/v5.0\\_Schemes%20Booklet\(EN\)%20\(small%20pdf\)%20-%20FlipbookEnglishSchemeBooklet.pdf](file:///D:/Research%20Paper/v5.0_Schemes%20Booklet(EN)%20(small%20pdf)%20-%20FlipbookEnglishSchemeBooklet.pdf)

### Overview of Artificial Intelligence

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K.L.E's S Nijalingappa College

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#### ABSTRACT:

Artificial intelligence and its promise to improve the efficiency have been tied with many business chains and had been handling newspaper for the last year.

AI is likely to transform live and work due to its high potential their adoption is treated as the fourth industrial revolution.

As per the study Gross Domestic Product (GDP), it has been expected that the AI will add 15.7 \$ Trillion to the global GDP by 2030. Though several countries have decided to their Strategy for AI. India has not formulated its strategy.



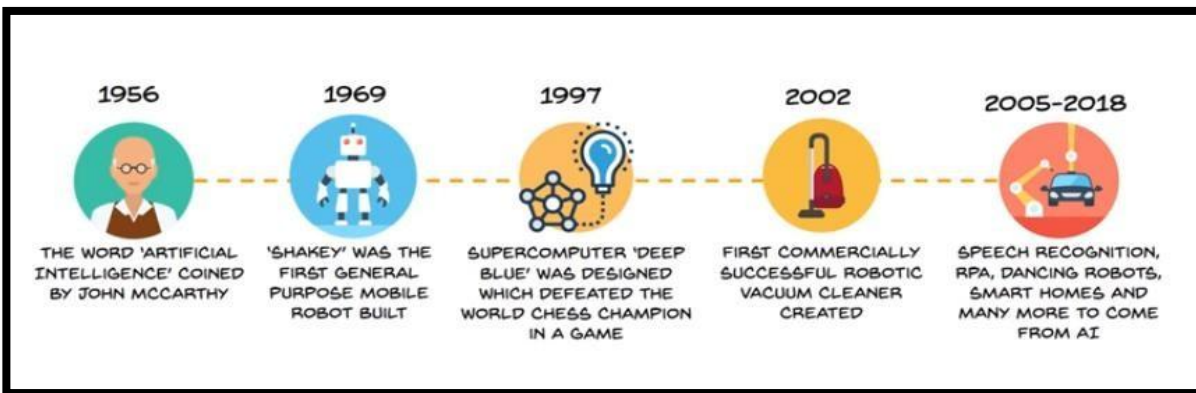
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**KEYWORDS:** *A.I, GDP, INDIAN ECONMY, CAGR, HEALTH CARE.*

### INTRODUCTION:

Artificial Intelligence is a method of making a computer, a computer controlled robot, or a software think intelligently like the human mind. AI is accomplished by studying the patterns of the human brain and by analyzing the cognitive process. The outcome of these studies develops intelligent software and systems.

### History:



Here's a brief timeline of the past six decades of how AI evolved from its inception.

- 1956 - John McCarthy coined the term 'artificial intelligence' and had the first AI conference.
- 1969 - Shakey was the first general-purpose mobile robot built. It is now able to do things with a purpose vs. just a list of instructions.
- 1997 - Supercomputer 'Deep Blue' was designed, and it defeated the world champion chess player in a match. It was a massive milestone by IBM to create this large computer.
- 2002 - The first commercially successful robotic vacuum cleaner was created.
- 2005 - 2019 - Today, we have speech recognition, robotic process automation (RPA), a dancing robot, smart homes, and other innovations make their debut.
- 2020 - Baidu releases the Linear Fold AI algorithm to medical and scientific and medical teams developing a vaccine during the early stages of the SARS-CoV-2 (COVID-19) pandemic. The algorithm can predict the RNA sequence of the virus in only 27 seconds, which is 120 times faster than other methods.

### **TYPES OF ARTIFICIAL INTELLIGENCE:**

#### 1. Purely Reactive:

These machines do not have any memory or data to work with, specializing in just one field of work. For example, in a chess game, the machine observes the moves and makes the best possible decision to win.

#### 2. Limited Memory:

These machines collect previous data and continue adding it to their memory. They have enough memory or experience to make proper decisions, but memory is minimal. For example, this machine can suggest a restaurant based on the location data that has been gathered.

#### 3. Self-Aware:

Self-aware machines are the future generation of these new technologies. They will be intelligent, sentient, and conscious.

### **Advantages and Disadvantages of AI**

#### **ADVANTAGE:**

- It reduces human error.
- It never sleeps, so it's available 24x7.
- It never gets bored, so it easily handles repetitive tasks.

#### **DISADVANTAGE:**

- It's costly to implement.
- It can't duplicate human creativity.
- It will definitely replace some jobs, leading to unemployment.
- People can become overly reliant on it.

### REVIEW OF LITERATURE:

#### 1. Article

Healthcare AI Market Trends, Demand, Growth and Future Scope 2023 To 2029 Inc, Intel Corporation, Nvidia Corporation. From exactitude consultancy



As per the report by Exactitude Consultancy, the global Healthcare AI Market at a CAGR of 42%, and it is expected to reach USD 169.7 billion by 2029, over the forecast period 2023 to 2029 Exactitude Consultancy, the market research and consulting wing of Ameliorate Digital Consultancy Private Limited has completed and published the final copy of the detailed research report on the Healthcare AI Market. The global Healthcare AI Market at a CAGR of 42%, and it is expected to reach USD 169.7 billion by 2029, over the forecast period. The healthcare AI market can be segmented by technology, application, and geography. Technology segments include machine learning, natural language processing, computer vision, and others. Application segments include medical imaging and diagnostics, drug discovery and research, electronic health records (EHRs), patient monitoring and care, and others.

#### 2. Article:

State of Artificial Intelligence in India 2021 -By AIM and TAPMI from - Kashyap Raibagi  
Artificial Intelligence or AI is a field of Data Science that trains machines to learn from inputs, adjust to inputted fields and criteria, and perform tasks of computational logic that match certain human cognitive levels. Over the last few years, AI has emerged as a primary data science function – by utilising advanced algorithms and ever-increasing computing power. AI is

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transforming business domains and organisations as AI algorithms are now designed to make real-time decisions and interpret various types of data and media. Analytics India Magazine (AIM), in association with TAPMI, has developed this study on the Artificial Intelligence market to understand the developments of the AI market in India, covering the market in terms of Industry and Company Type. Moreover, the study delves into the market size of the different categories of AI and Analytics start-ups/boutique firms.

### **Overview of the Artificial Intelligence Market in India**

The Artificial Intelligence technology function is no longer an emerging technology segment – AI as a function has pervaded almost all industries and functions – from e-Commerce to BFSI and from Manufacturing to Agriculture – Data Science and Deep Learning are increasingly utilized to solve complex business challenges.

- AI is increasingly adopted across Contact Centre Customer Services (RPA-driven Chat Bots), Media Delivery (ML and AI-driven social media, Streaming content, and e-Commerce recommendations), and Intelligent Networks / Telecom Services, to name a few.
- AI adoption is no longer restricted to financial enterprises or large technology implementations or organizations. AI adoption is increasingly becoming democratized with personnel from non-technological backgrounds adopting AI processes in their functional roles.

### 3. ARTICLE: AI adoption to add \$500 billion to GDP by 2025: NASSCOM report



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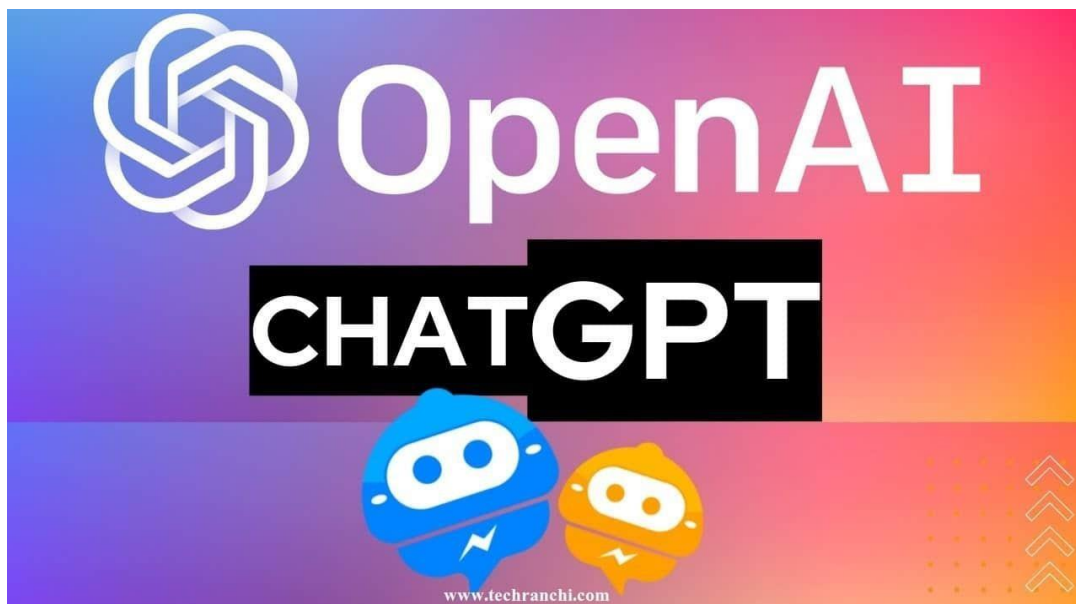
The adoption of artificial intelligence (AI) and data utilization strategies can add \$500 billion to India's GDP by 2025, according to a report by the National Association of Software and Services Companies (NASSCOM).

AI adoption in four key sectors—Consumer Goods and Retail (CPG), Banking, Financial Services & Insurance (BFSI), Energy & Industrials, and Healthcare can contribute 60 per cent of AI's potential value-add of \$450-500 billion to India's GDP by 2025, according to the report "AI Adoption Index" launched by NASSCOM, along with Ernst & Young, with support from Microsoft, EXL, and Capgemini.

Global investments in AI have more than doubled over the last couple of years, from \$36 billion in 2020 to a high of \$77 billion in 2021. Though AI investments in India growing at a compound annual growth rate (CAGR) of 30.8 per cent and is poised to reach \$881 million by 2023, it will still represent just 2.5 percent of total global AI investments of \$340 billion.

This creates a massive opportunity for Indian enterprises to accelerate investments. India's goal of having a \$1-trillion GDP by FY2026- 2027 should have a strong correlation to the maturity of AI adoption, the report noted.

#### 4. Artificial Intelligence Applications in Investing:





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## Growing Infrastructure A key to Transforming Indian Economy

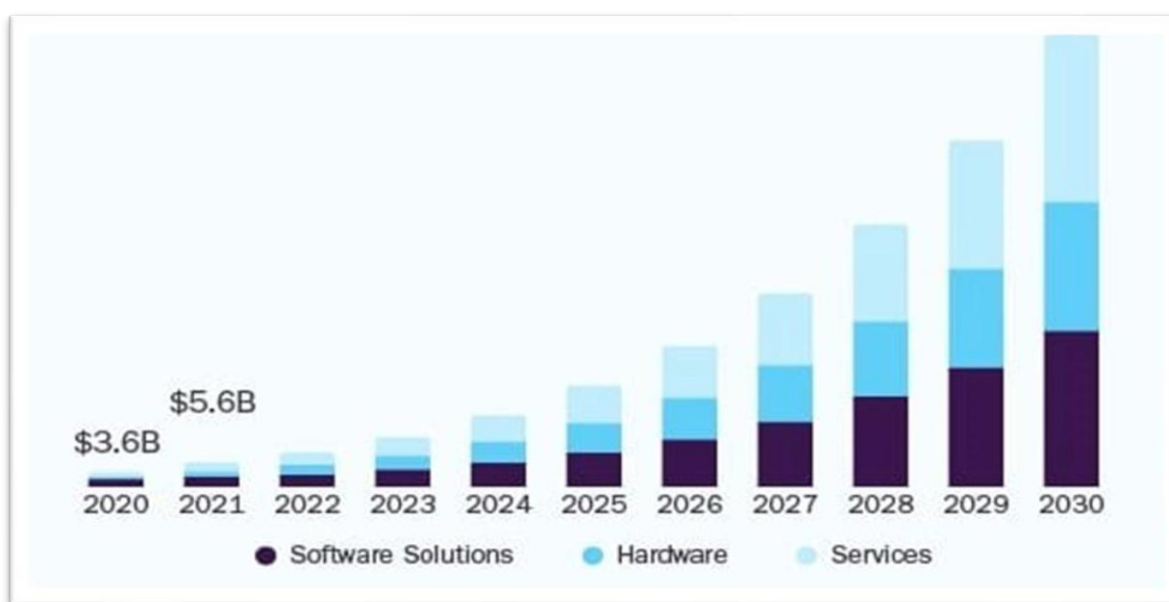
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Artificial intelligence (AI) is being used for everything from analysing images for insurance claims to generating legal documents. But how is this emerging technology being applied in the world of investing.

The last few months for publishing articles using an AI assist from ChatGPT. The articles dealt with financial topics like certificates of deposit, and they were basic explainers for relatively accessible concepts. Unfortunately, these articles contained factual errors, suggesting AI still has a way to go.

Once technology like ChatGPT has had more time to develop, it could see more advanced articles explaining investing topics and strategies. Though plenty of articles already cover similar themes, AI's unique access to so much data may make its insights even more helpful.

### Analysis and Interpretation



- Huge challenges for health systems in India in terms of quality, accessibility, affordability and inequity. On the one hand, India is home to some of the best hospitals in the world, contributing to a growing medical tourism sector
- The ratio is particularly low in rural areas, leaving patients to travel long distances to get even basic care. Furthermore, government spending on healthcare is one of the lowest in the world. The India's GDP also allocated to healthcare

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- Most Indians rely on private health providers – 79 per cent of urban households and 72 per cent of rural households accessed private health facilities
- New ML or other AI technologies could help address a number of these challenges, by improving access to quality healthcare, particularly in rural and low-income settings; addressing the uneven ratio of skilled doctors to patients.

### **Conclusion:**

India has unique to apply technology to solve some of its biggest problems such as shortage of healthcare facility, low quality of education, etc. It is not possible to meet the target of providing good healthcare or quality education using conventional methods. AI technology provides an alternative to achieve the same.

### **Reference:**

1. <https://www.sbi.co.in/>
2. <https://www.moneycontrol.com/financials/statebankofindia/results/yearly/SBI/2#SBI>
3. NON-PERFORMING ASSETS (NPAs)-HOW TO CONVERT INTO PERFORMING ASSETS AND SUPPORT THE ECONOMIC GROWTH(2020) Dr.Binoy Joy Kattadiyil and Dr.Mrutyunjay Sisugoswam
4. <https://www.ijser.org/researchpaper/Trend-of-Non-Performing-Assets-Analysis-of-State-Bank-of-India.pdf>
5. <https://garph.co.uk/IJARMSS/Aug2017/8.pdf> <https://www.sbi.co.in/>

**Corporate Governance – A vital player in economic growth of nation**

Bhuvana.R and Usha.B.G

Mcom Final Year

K.L.E. Society's S. Nijalingappa College

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**Abstract**

Corporate governance is well heard yet obscured subject matter. The term corporate governance refers to the structure of rules, practices, and processes used to direct and manage a company. The study is conceptual basis and secondary data are taken for the study. It existed in Vedic times itself in India and it is also mentioned in Kautilya's Arthashastra. Corporate governance is improved in the current era and is also brought up in Indian Company's Act 2013.

Over the years the corporate governance has proved itself to be a pavement for the economic development of the nation by its transparency, accountability, and shareholders rights. The convulsion in the organization structure and perplexity in the role of stakeholders are the hindrances. Upon the barriers corporate governance managed to enhance and spread wide.

The growth in infrastructure includes corporate governance as it has vital role in the economic development. Corporate governance assists in lowering cost of capital and minimizing of wastage, corruption etc.

Governance builds trust and predictability, hence generating comfort to investors. The problem and its effect on the shareholders can be determined by the framework of good corporate governance. The relationship between organization structure, role of stakeholders and corporate governance is determined. Companies that implement good corporate governance are expected to have a good financial performance.

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**Key words:** *Organization structure, role of stakeholders and economic development*

### **Introduction**

Corporate Governance refers to the way in which companies are governed and to what purpose. It is the system by which companies are directed and controlled. This is a system that aims to install policies and rules that helps maintain the cohesiveness of an organization.

Emergence of corporate governance happened in India after mid 1996 when economic liberalization and deregulation of business and industries came into picture. The concept of corporate governance India exists from a long back also can be said as Arthashastra. The concept of good governance is very old in India, dating back to third century B.C. where Chanakya elaborated fourfold duties of a king. In India, the CII took the lead in framing a desirable code of corporate governance in April 1998. This was followed by the recommendations of the Kumar Mangalam Birla Committee on corporate governance. This committee was appointed by SEBI.

Good corporate governance involves establishing principles of security, transparency, equity, compliance, reliance and accountability. Corporate governance is the framework of regulations and procedures that determines how the board of directors manages a company. It is an organization cultivates a powerful and effective decision making process through practices and policies. Corporate governance is essential to develop added value to stakeholders. It ensures transparency which ensures strong and balanced economic development. This also ensures that the interests of all shareholders are safeguarded. They are in the form of disclosure of financial information reduces the cost of capital for institutions. It help attract investment, whether foreign or domestic, and helps to limit capital flight and combat corruption. The corporate governance also helps to ensure transparency in the company's operations and to promote long term sustainable growth.

Organization structure and role of stakeholders are the foundation of the corporate governance. Proper organization structure and stakeholders participation is very important for good corporate governance. Infrastructure and economic growth are connected to each other. Corporate governance plays a key role in economic development leading to infrastructure growth.

### **Review of literature**

Corporate Governance in India written by Jayati Sarkar and Subrata Sarkar is a long and broad perspective on corporate governance. It provides limelight on various relevant legal and other

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reforms taken place in India over decades and also emphasized their economic impact. The book also shares the role of institutional investors and their importance in emerging market. Analysis on various internal corporate governance mechanism and various stakeholders' roles are briefed. The work in the book upholds future potentiality of corporate governance in India.

Need of corporate governance by Dr. Satish, posted on 22<sup>nd</sup> March, 2019 in economy related articles specifies that corporate governance existed during Vedic times itself. The article also says that corporate governance has become global giant and its essence is doing right things in a right way. According to the author corporate governance refers to directing and controlling the companies in a systematic manner. It mentions about the promoting corporate fairness, transparency, and accountability. In the article the first voluntary code of corporate governance is mentioned, saying that it was initiated by CII (Confederation of Indian Industry) in year 1998. Few committees brought reforms in Indian corporate governance they are Naresh Chandra Committee, Narayana Murthy Committee etc. The corporate governance is included in various provisions of Indian Companies Act 2013.

### **Methodology**

The study is conceptual basis, that is, the analytical presentation of several variations and contexts. The source for the study is derived from the secondary data. Based on previous studies, the data used in the study are previously been gathered regarding the corporate governance.

### **Objectives**

- The study aims to know and understand the concept of corporate governance and raise awareness.
- This study is to prove the organization structure, shareholders, and corporate governance relation to each other.

### **Importance of corporate governance**

- i. Creation of wealth.
- ii. Protecting the interest of all stakeholders.
- iii. Shapes the growth and future of capital market and economy.
- iv. Contribution to the efficiency of the business enterprises.
- v. It lowers the capital cost.

### **Scope of Corporate Governance**

#### **Economic growth**

Proper implementation of corporate governance enhances the country's economic growth.

1. The regulations facilitating transparency, accountability, fairness, and equity in managing the company affairs internally and externally
2. Boosting the confidence of investors expedite buying and selling of securities which directly influences the maintenance of financial market liquidity
3. Regulatory authorities of the corporation being professional, competent and fast in dealings promote market performance

#### **Social responsibility**

The primary objective of implementing corporate governance is to facilitate sustainable growth; the development of a business must encircle body economic and social development that corporate governance codes enable.

1. It acts as a tool for social construction where the companies practice both profit maximization and social welfare, and these practical applications benefit the growth of social responsibility among corporate.
2. By providing reasonable corporate governance increase investor confidence leading to boost investments and income generation for the society.

#### **Business expansion and development**

An effective corporate governance strategy such as maintaining proper audit of accounts, efficiency in director's role, the cordial relationship among shareholders etc, ultimately impact business expansion and diversification it is facilitated by

1. Raising capital at a faster rate because of increased public confidence level
2. It causes a hike in demand and supply of stocks which reflects in the stock price increase
3. Minimize mismanagement inside corporation helping expansion of business

### Increased efficiency, Lowered illegalities, and mismanagement

1. Well-regulated internal management with an appropriate number of executives, non-executive and independent directors avoid impartial decision making
2. All piece of information, genuine and relevant are facilitated adequately to the market participants to mitigate defrauding
3. Transparency in the appointment of executives and directors lower illegal governance
4. Accountability of the board of directors and other executive promote a fair legal remedy to the aggrieved party
5. Surveillance on corporation affair by outside market players lower market illegalities

### Key-Players of Corporate Governance

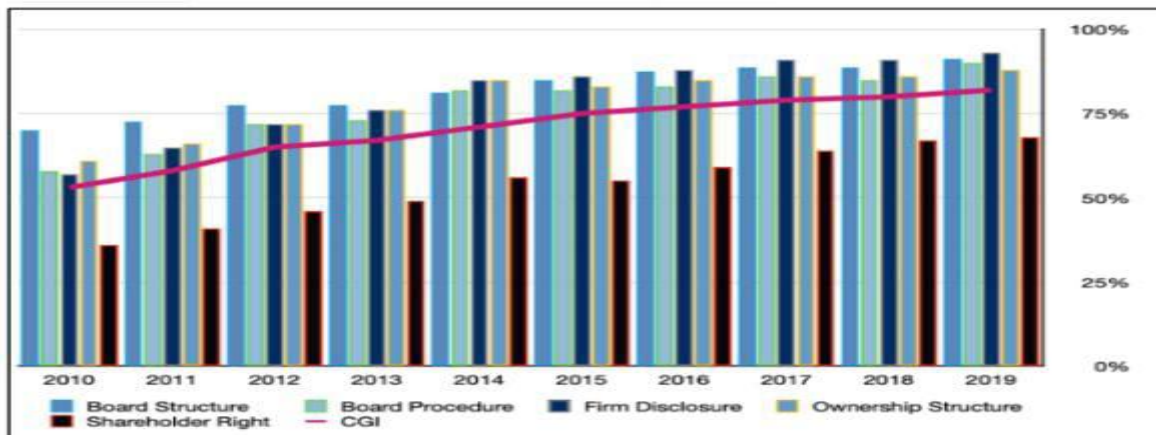
1. **The company or entity:** An artificial person created by law with perpetual succession and a common seal but operating through the medium of directors.
2. **Directors:** Custodians of the company assets, which are monitored and segregate to the shareholders at the time of winding up
3. **Managers/Executives:** Those who handle the company assets and administrate the everyday business of the corporations
4. **Shareholders:** Those the company shares, either from the private or public entities.
5. **Stakeholders:** Different market participants

### Key Principles of Corporate Governance:

1. **Discipline** – A company's higher management adhere to certain practices and behaviors that are globally recognized are proper. This refers to corporate discipline.
2. **Transparency** – This is an important principle of Corporate Governance that measures how good the management is and all necessary information available in the most candid manner while maintaining accuracy.
3. **Independence** – This refers to the extent of using mechanisms to avoid and minimize the possibility of a clash of interest.
4. **Accountability** – This implies that the individuals and groups responsible for making decisions and taking actions should always be accountable for their decisions and actions.

**5. Responsibility** – This is yet another important principle of Corporate Governance. It emphasizes that with regard to management, there should be scope for behavior that allows corrective actions and has room for penalization for mismanagement.

### Analysis of the study



<https://images.app.goo.gl/S6xXY9kx34FwAUWe8>

The above statistical data represents board structure, board procedure, firm disclosure, ownership structure, shareholders right and corporate governance index (CGI). It is a histogram chart having years on X axis and percentages on Y axis.

The board structure has shown improvement from the year 2010 to 2019. The percentage has increased and this is evidently shown in the graph. Board procedures have also shown an improvement in the years. The quality of the procedures of board has enhanced. The firm disclosure indicates the level of transparency which has become better with the time. Ownership structure has shown an upgrade in the years. The rightful owners that are shareholders, their rights are also prioritized and this is proved in the acceleration of the graph in regards to shareholders rights. The CGI, that is, Corporate Governance Index has seen boost in its growth over the period.

The above graph evidently proves the improvement of the corporate governance over the years. The improvement has accelerated the financial position of the company which has lead to the economic development extending to the infrastructural growth.



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### **Statement of problem**

The boost of corporate governance is slow. There is complexity in the understanding the role of stakeholders and organization structure.

### **Findings**

The complicated structure of the organization and compounded stakeholder's participation though the corporate governance is improving, the time consuming is very long.

Understanding and deriving the data regarding the corporate governance is difficult as it is having nexus variables attached to it.

### **Suggestions**

To have proper pre-determined and simple organization structure creating awareness by spreading importance and necessity of corporate governance will be ameliorating.

The refining corporate governance and its positive impact towards the economic development can be used as evidence to motivate for better governance.

Shareholders rights are to be prioritized and transparency is to be maintained for amplifying the corporate governance. Focus on the problems and probable issues to overcome at the earliest.

### **Conclusion**

The study focuses on corporate governance in India and its improvement which paves the way for economic development of the nation. Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. This is widely based on the organization structure, role of stakeholders etc. The benefits of Corporate Governance are manifold, and all organizations and management should adopt it to ensure the effective running of the business. It helps to build the reputation of the companies following them and promotes healthy work culture within the organization. The main principles of Corporate Governance are accountability, fairness, transparency, and responsibility. The encounters of economic transition and financial crises in developing and emerging market economies of various countries led to a good corporate governance code to maintain a stable market performance.

Good corporate governance helps fill the loopholes, promote company growth and enhance investor confidence in the securities market. It helps lower the cost of capital and facilitates the development of company management. It also ensures the companies legal commitments and forms friendly relations among the market participants. Thus, it is evident that an improved

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corporate governance code helps evaluate and evaluate corporations' competence in participating in the economic building. Betterment of organization structure and promoting corporate governance by magnifying the knowledge of stakeholders on their performance and role would boost the economy by enhancing corporate governance.

### **Bibliography:**

1. Corporate Governance in India – Jayati Sarkar and Subrata Sarkar
2. Economic article
3. Wikipedia
4. <https://thecompany.ninja/scope-and-importance-of-corporate-governance/>
5. <https://byjusexamprep.com/current-affairs/corporate-governance>

**Assessing the Performance of Index Funds in India: A Conceptual Analysis of  
Their Risk-Adjusted Returns, Tracking Error, and Efficiency**

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**ABSTRACT**

Index funds have become increasingly popular among investors in India, providing a cost-effective and diversified way to invest in the stock market. This study offers a conceptual analysis of the performance of Indian index funds with a focus on their efficiency, tracking error, and risk-adjusted returns.

To explore the comparative performance of actively managed funds versus index funds' performance over time along with market conditions, costs, and management.

It also gives a basic understanding of the statistical tools used in analyzing the performance of index funds like Sharpe ratio, Treynor ratio and Jensen's alpha. The paper begins with an overview of index funds, active funds and their regulatory framework.

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**Keywords:** *Index funds, Tracking error, Active funds, risk and return, Performance, investors.*

### INTRODUCTION

#### **1.1.Index Funds**

An index fund is a type of mutual fund or exchange-traded fund (ETF) with a portfolio constructed to match or track the components of a financial market index, such as the Standard & Poor's 500 Index (S&P 500).

An index mutual fund is said to provide broad market exposure, low operating expenses, and low portfolio turnover. These funds follow their benchmark index regardless of the state of the markets.(FERNANDO, 2023)<sup>[1]</sup>

Index funds are generally considered ideal core portfolio holdings for retirement accounts, such as individual retirement accounts (IRAs) and 401(k) accounts. Legendary investor Warren Buffett has recommended index funds as a haven for savings for the later years of life.

Rather than picking out individual stocks for investment, he has said, it makes more sense for the average investor to buy all the S&P 500 companies at the low cost that an index fund offers. (FERNANDO, 2023)<sup>[1]</sup>. Now that we know the basic definition of index funds let us understand how they work in detail.

Index Funds are a type of equity investment, so they primarily invest in listed equity stocks. These investments are chosen based on the index that the mutual fund is replicating. The index fund portfolio only changes when the benchmark indexes changes. If the fund follows a weighted index i.e., different stocks having different proportions, the fund manager may periodically rebalance the different securities to reflect the weight of its presence in the benchmark. (Chakravarti, n.d.)<sup>[2]</sup>

Investing in multiple stocks of the index helps reduce the concentration risk i.e., the risk arising from the influence of a single holding in the mutual fund's portfolio. The basic idea is that by mimicking the index profile, the fund will potentially match the performance of its chosen index. So, typically the Index Fund will perform well when its chosen index performs well and vice versa. (Chakravarti, n.d.)<sup>[2]</sup>

### **1.2.Active Funds**

The job of an active fund manager is to pick and choose investments, with the aim of delivering a performance that beats the fund's stated benchmark or index. Together with a team of analysts and researchers, the manager will 'actively' buy, hold and sell stocks to try to achieve this goal.(Barclays, n.d.)<sup>[3]</sup>. The fund manager makes a careful selection of securities that fit the fund's investing style and that she expects will collectively outperform the chosen benchmark. (Rajan Raju, 27 May 2020)<sup>[4]</sup>

### **1.3. Tracking Error**

Tracking error is defined as the annualized standard deviation of the difference in returns between the Index fund and its target Index. In simple terms, it is the difference between returns from the Index fund to that of the Index.(National Stock Exchange of India Ltd, 2023)<sup>[5]</sup>. Tracking error is also defined as the annualized standard deviation of the difference in returns between the index fund and its target index.(Falguni Pandya, 2016)<sup>[6]</sup>.

## **1. REVIEW OF LITERATURE**

*Sarkar, S. S., Dutta, S., & Dutta, P. (2013)*<sup>[7]</sup> in their study they review and compare a number of Indian index funds. The CRISIL composite ranking of an index fund reflects the quarterly performance of that fund and is subject to fluctuations. They are interested in those index funds that do not deviate significantly from the underlying benchmark index in the long run. They studied 23 index funds based on the Nifty and sensx. They found that 12 index funds are co integrated with the underlying benchmark index. Co integration is an important feature of an index fund, as it ensures that the fund is tied to the underlying benchmark index that it aims to imitate.

They observe that if an index fund is not co integrated then its tracking error may vary widely over different periods of time. Consequently, low tracking error in the recent past need not necessarily ensure that the fund will continue to track the benchmark index closely in future, especially in the long run. In contrast, co integration ensures that the index fund does not deviate significantly from the underlying index that it imitates. So, along with low tracking error, co integration is a desirable property that a good index fund is expected to exhibit, especially for an investor with a long investment horizon.

*Inder, S., & VOHRA, D. S. (2012)*<sup>[8]</sup> In their study they evaluate the long run performance of the selected index fund schemes and to make comparative analysis of the performance of the funds on the basis of the risk-return framework during the period January 2005 to December 2011. On the basis of evaluation of the performance of index mutual funds it is concluded that though Index funds are a great avenue for investment, but they are just the follower of market. They undoubtedly try to capture market sentiment, good as well as bad, thus the performance always flows along the market trend.

The authors consider all the parameters of evaluation in consideration and say that out of the schemes considered in the study, the ICICI Prudential Index Fund, Tata Index Fund and Franklin India Index Fund are better performers in case of Growth option of Index Fund. While on the other hand, in case of Dividend option the Franklin India has shown better performance. Franklin India Mutual Fund has been able to capture market very well in both growth as well as dividend options by showing the lowest of tracking error.

### **3. OBJECTIVES**

- To understand the efficiency of index funds in India in terms of their management fees, portfolio turnover, and transaction costs and compare it with actively managed funds.

### **4. STATEMENT OF PROBLEM**

The purpose of this conceptual paper is to analyze the performance of index funds in India, examine the factors that affect their performance, such as market conditions, costs, and management, and identify the statistical tools used to assess their efficiency based on the available literature. It aims to provide valuable insights for investors considering investing in index funds and suggests doing more research to measure the current performance of index funds and to create awareness on investing in index funds.

### **3. RESEARCH METHODOLOGY**

The current study has drawn substantially from a review of numerous reports, journals, and articles that have been collected and published that are pertinent to the topic of this research. The approach of a publication fills in any research gaps it may have. Searches on Google Scholar, Research Gate, and Academic were used to conduct the research, and only auxiliary data

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Collected from terms like "index funds," "active funds," "types of index funds," "performance of index funds," and "active funds" was used. Using a careful analysis of other research articles and the acquisition of data from the internet, the report examined the performance of index funds in the Indian market.

### **SCOPE OF THE STUDY**

The study aims to provide a conceptual analysis of the performance of index funds in India, focusing on their risk-adjusted returns, tracking error, and efficiency. It will explore the theoretical underpinnings of index funds and their role in the Indian financial market. It will explore the concept of risk-adjusted returns and its significance in evaluating the performance of index funds and also compare them with active funds. The study will theoretically understand the tools used to measure the performance of index funds. Moreover, the study will analyze the concept of tracking error and its impact on the performance of index funds. The study will explore the factors that contribute to tracking error, such as liquidity, transaction costs, and market volatility, and their significance in the Indian market.

### **UNDERSTANDING THE REGULATORY FRAMEWORK OF INDEX FUNDS AND ACTIVE FUNDS IN INDIA**

In India, both index and active funds are regulated by the Securities and Exchange Board of India (SEBI) under the SEBI (Mutual Funds) Regulations, 1996. Under the SEBI regulations, mutual funds in India are classified into different categories based on their investment objectives and portfolio composition.

For example, equity mutual funds invest primarily in stocks, while debt mutual funds invest primarily in fixed income securities such as bonds. The regulations require that mutual funds in India disclose information about their investment objectives, portfolio composition, fees, and expenses to investors. Additionally, mutual fund managers must adhere to certain portfolio composition requirements based on the category of mutual fund they manage.

For example, equity mutual funds must invest at least 65% of their assets in equities and equity-related instruments, while debt mutual funds must invest at least 80% of their assets in debt securities.

### CONCLUSION

Based on the available evidence, it appears that actively managed equity funds do not consistently outperform low-cost index trackers. In fact, a majority of actively managed funds have negative information ratios and lower rolling 1-year returns compared to index funds. Additionally, the higher expense ratios of actively managed funds can result in lower investment returns for investors. On the other hand, index funds provide a simple and cost-effective way to track the performance of a market or specific index.

The choice between active and index funds depends on an investor's individual goals and risk tolerance. It's important to carefully consider the performance and cost factors of each option before making an investment decision. When comparing index funds and active funds, the Treynor Index can help investors assess which type of fund is providing a higher excess return per unit of market risk. In general, index funds tend to have lower fees and lower turnover than active funds, which can result in a higher Treynor Index. However, active funds may be able to generate higher excess returns through skilful management, which can also lead to a higher Treynor Index. Ultimately, the choice between index funds and active funds depends on an investor's individual goals, risk tolerance, and investment philosophy. The Treynor Index can be a useful tool to help inform that decision.

### REFERENCES

- Sarkar, Subhrangshu & Dutta, Santanu & Dutta, Pinky. (2013). A Review of Indian Index Funds. *Global Business Review*. 14. 89-98.
- Inder, S., & VOHRA, D. S. (2012). Mutual fund performance: an analysis of index funds. *CHIEF PATRON CHIEF PATRON*.
- Bewtra, P. Comparison of performance of Index Mutual Funds Vs Actively Managed Funds.
- Mohan, V. K., & Prasad, K. S. (2016). Performance Of Exchange Traded Funds A Comparative Analysis Of Index Etf's And Index Funds In India.
- Raju, R., & Mittal, A. (2020). Active versus Index Equity Investing-Early Evidence from India. *Available at SSRN 3611516*.
- Banerjee, S. (2015). Measurement of Tracking Error Based on Category Index-The Hidden Cost of Index Funds. *American Journal of Theoretical and Applied Business*, 1(1), 37-40.





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