JOURNAL FOR UNIFIED RESEARCH

A Journey Towards Academic Excellence

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Journal for Unified Research

An International Multidisciplinary Peer Reviewed Journal

A Bi-Annual Publication

Sunbeam College for Women
Bhagwanpur, Varanasi

An Initiative of Internal Quality Assurance Cell (IQAC)

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MESSAGE FROM THE CHAIRPERSON'S DESK

It gives me immense pleasure to introduce the inaugural issue of the Journal of Unified Research, a testament to Sunbeam Group's commitment to fostering innovation and academic excellence. This journal embodies our vision of creating a platform that bridges disciplines, encourages collaboration, and inspires critical thinking.

As we embark on this scholarly journey, I extend my heartfelt gratitude to the contributors, editorial team, and reviewers whose efforts have shaped this publication. I am confident that the Journal of Unified Research will serve as a beacon for knowledge seekers and researchers, catalysing impactful discussions and groundbreaking discoveries.

Let us continue to explore, innovate, and contribute meaningfully to the ever-expanding horizons of learning and research.

With Best Wishes.

Dr. Deepak Madhok
Chairperson,
Sunbeam Group of Educational Institutions

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MESSAGE FROM THE VICE CHAIRPERSON'S DESK

It is with great pride and joy that I present the inaugural issue of the Journal of Unified Research, a platform dedicated to fostering innovation, collaboration, and the pursuit of knowledge across diverse disciplines.

At Sunbeam Group, we have always believed that education is not confined to classrooms but extends into the realms of inquiry and discovery. This journal is a testament to our commitment to nurturing a culture of research and intellectual growth among scholars, educators, and students.

I sincerely congratulate the editorial team and contributors for their dedication and vision in bringing this endeavour to life. May this journal serve as a beacon of excellence and inspire meaningful contributions to the academic community. Wishing the Journal of Unified Research a successful and impactful journey!

With best Wishes

Bharti

Ms. Bharti Madhok
Vice Chairperson,
Sunbeam Group of Educational Institutions

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FROM THE EXECUTIVE EDITOR'S DESK

I am immensely pleased to launch the first issue of this journal, ***JOURNAL FOR UNIFIED RESEARCH (JUR), An International Multidisciplinary Peer-Reviewed Journal, Volume-I, Issue-1 (January-June 2024),*** published by **the Internal Quality Assurance Cell (IQAC), Sunbeam College for Women, Varanasi, India.** This new broad-scope publication seeks to publish excellent research papers and research articles that offer a perfect platform for exchanging knowledge on a variety of interdisciplinary subjects.

The current edition of this journal has 12 outstanding research papers and articles from a variety of fields that were submitted by academicians and researchers who are actively involved in research activities. Its goal is to promptly disseminate excellent research articles that demonstrate how advancements in various domains might help us tackle the problems of the twenty-first century towards attaining sustainable development goals.

I would like to express my heartfelt gratitude to all the contributing authors for providing such a rich variety of research papers and articles on pressing issues. I also express my heartfelt thanks to our editorial team, who worked hard for this issue of JUR.

I am inviting valuable suggestions and comments from academicians, researchers, and readers, which will help in formulating new ideas as well as improving the quality of the journal in upcoming issues.

Thank you,

Dr. Amit Kumar
(Associate Professor)
Executive Editor
Journal for Unified Research (JUR)

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Frauds in Banking Sector: Impact on the Indian Economy

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Abstract

Banking sector is considered to be one of the economic pillars on which major economic and business activities stands. Over the years, it has been observed and witnessed that bank frauds have increased the pain of the customers and the suffering of the economy at large. It is quite surprising to see the surge in banking frauds by public sector banks, private sector banks and foreign banks. The banking frauds not only dismantle the trust of the people but also affect the economic growth at large. In this paper, an attempt has been made to understand the meaning of fraud and also it analyses the continuous rise of Non- Performing Assets in the banking industry. Further, the study endeavours to throw light on the impact of increased bank frauds on profitability of the banking sector in India and on the entire economy. The chapter concludes with the findings and conclusion of the study.

Key words*: Bank Frauds, Non-Performing Assets, Public Sector Banks, Private Banks, Foreign Banks, Indian Economy.*

Introduction

Banking sector plays an important role not only in a well-organized economy but also in a developing economy. A well-organised banking system is an indispensable part of a country's economic growth, it is considered as a barometer which measures the growth of the country. The role of banking sector is to mobilize funds and channelize them for productive purposes. Banks are considered to be the hub of economic and monetary activities as they are not merely dealers in money, in fact they are dealers in development. Banking industry in India, which was operating comfortably till 1990s, was pushed into intense competition thereafter. After independence, the banks in India had gone from ideology-based lending to competition-based lending.

It has been observed from past few years that the loans granted by the banks to the borrowers are turning out to be a big failure majorly due to high degree of frauds and scams. But the question is: are the borrowers only involved in bank frauds? No, certainly not, at some point of time, employees are also involved for their personal gain.

Objective of the study:

The main objective of this paper is to study the bank frauds and its impact on Indian economy.

Limitations:

The study is based on secondary data; thus, all the banks have not been taken individually. Sector wise data has been taken and analyzed i.e., public sector banks, private banks and foreign banks. The study mainly comprises of four years that is 2017-18, 2018-19, 2019-20 and 2020-21.

Significance of the study:

The study has been done with the purpose of finding out the relative share of banking frauds and NPAs of the banking sector. It is useful for the people who are interested in knowing banks frauds. This will acquaint them with the data of all the banks' frauds compiled at one place along with the findings, conclusion and recommendations.

Literature Review

(Chakrabarty, 2013) According to the survey conducted by Reserve Bank of India around 1,76,547 banking fraud cases were reported and the amount involved was Rs 31401.01 crores out of which 1,69,190 cases were reported in the commercial banks and amount involved was Rs 29910.12 crores. Public sector Banks reported 29653 cases, 93331 cases were reported in Private sector

Banks and 46206 cases were reported in Foreign Banks. 65% of fraud cases were committed because of technology related issues such as internet banking frauds, credit card frauds, and other e-banking frauds.

A Ghosh [1992] The Reserve Bank of India had set-up a high-level committee in 1992 which was headed by Mr. A. Ghosh, the then Dy. Governor Reserve Bank of India to inquire into various aspects relating to frauds malpractice in banks. The committee had noticed/observed three major causes for perpetration of fraud as: Laxity in observance of the laid down system and procedures by operational & supervising staff. Over confidence was reposed in the clients who indulged in breach of trust. Unscrupulous clients by taking advantages of the laxity in observance of established time-tested safeguards also committed frauds. In order to have uniformity in reporting cases of frauds, RBI considered the question of classification of bank frauds on the basis of the provisions of the IPC.

According to Report on Trends and Progress of various years, the bank frauds happened due to increase in NPA which affected the Profitability of the banks.

Bank Frauds

As per law, bank fraud can be defined as an illegal act by an individual or configuration to illegitimate striving to possess or receive money from a bank or financial institution. It is evident that the Indian Banking System has a huge network of bank branches all over the country. As of March 2021, Indian banks had more than 1,22,000 branches and over 2 lakh ATMs, out of these only 36,383 branches are in rural areas, 24,366 in urban areas, 35,604 in semi-urban areas and 26,623 in metropolitan areas. Further, the amount disbursed in terms of loans and advances by banking sector was amounted to Rs. 10,711,596 crores in 2021 as compared to Rs 10,211,342 crores in 2020 and Rs 97,09,829 crore in 2019. **Table 1** and **Table 2** exhibits the amount deposits with the banks by the depositors and amount disbursed by scheduled commercial banks during 2017-2018, 2018-2019, 2019-2020 and 2020-21, 2021-22 and 2022-23

Table 1: Deposits received by Commercial Banks in India (in crore)

	2018	2019	2020	2021	2022	2023
Public Sector Banks	8,262,322	8,486,215	9,048,420	9,900,764	10,717,362	11,709,581
Private Sector Banks	30,13,688	37,70,013	4,104,420	4,800,645	5,464,242	6,299,318
Foreign Banks	4,94,901	5,81,857	6,84,269	777,173	776,266	845,482
Total	11770911	12838085	13837109	15478582	16957870	18854381

Source: www.rbi.org.in

Table 2: Loans granted by Commercial Banks in India (in crore)

Loans and Advances						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Public Sector Banks	5,697,350	5,892,667	6,158,112	6,348,759	7,043,941	8,283,763
Private Sector Banks	26,62,753	33,27,328	36,15,519	3,939,291	4,553,541	5,366,673
Foreign Banks	3,51,016	3,96,726	4,28,067	423,546	420,780	465,483
Total	8,711,119	9,616,721	10,201,698	10,711,596	12,018,262	14,115,919

Source: www.rbi.org.in

It can thus be stated (from the above table) that the amount disbursed by the banks has taken a hike from last 3 years. The RBI data shows that the bulk of frauds relates to loans and takes place in banks. The evidence of this can be seen in the tables ahead. Now, let us first concentrate on the non-Performing assets. What is Non-Performing Asset (NPA)? As **defined by RBI**, an asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank. A 'non-performing asset' (NPA) was defined as a credit facility in respect of which the interest and/ or installment of principal has remained 'past due' for a specified period of time. An amount due under any credit facility is treated as "past due" when it has not been paid within 30 days from the due date.

The Indian Banking Industry has been witnessing a surge in the NPAs across various scheduled commercial banks (**Table 2 and Table 2.1**) and financial frauds have thus been unavoidable. The RBI had to labour a lot to bring down the number of banking frauds but it was seen that in spite of lot of measures taken by the RBI, the number of frauds rose. And the sad reality is not only middle level workers but also the top bank officials were involved in the frauds. Adding further, there is a connection between NPAs and the banking frauds because the financial frauds later turn into NPAs affecting the profitability of the banks. It is even more painful to see that the Public Sector Banks, who are trusted so much by the citizens of the country, reported bulk of bank frauds in 2017-18.

Table 3: Trends in Non-Performing Assets –Bank Group-wise (Amount in Rs. Crore)

Items	**Public Sector Banks***	**Private Banks^**	**Foreign Banks**	**Small Finance Banks**	**All SCBs#**
	Gross NPAs				
Closing Bal for 2017-18	8,95,601	1,29,335	13,849	894	10,39,679
Opening Bal for 2018-19	8,95601	1,29,335	12,733	1,087	10,38,684
Opening Balance for 2019-20	7,17,850	1,83,604	12,242	1,660	9,15,355
Addition during the year 2018-19	2,16,763	90,526	6,114	1046	3,14,449
Addition during the year 2019-20	2,38,464	1,31,249	6,751	1,764	3,78,228
Reduction during the year 2018-19	1,33,844	42,748	2,557	562	1,79,711

Reduction during the year 2019-20	99,692	51,335	3,832	1,046	1,55,905
Written-off during the year 2018-19	1,83,391	49,098	4,048	411	2,36,948
Written-off during the year 2019-20	1,78,305	53,949	4,953	669	2,37,876
Closing Bal for 2018-19	7,39,541	1,83,604	12,242	1087	9,36,474
Closing Bal for 2019-20	6,78,317	2,09,568	10,208	1,709	8,99,803
Gross NPAs as percent of Gross Advances**					
2017-18	14.6	4.7	3.8	1.7	11.2
2018-19	11.6	5.3	3.0	1.7	9.1
2019-20	10.3	5.5	2.3	1.9	8.2
2020-21	9.11	4.94	2.42	5.35	7.33
Net NPAs					
Closing Bal for 2017-18	4,54,473	64,380	1,548	437	5,20,838
Closing Bal for 2018-19	2,85,123	67,380	2,050	586	3,55,076
Closing Bal for 2019-20	2,30,918	55,746	2,084	784	2,89,531
Closing Bal for 2020-21	196450.81	55808.98	2986.80	2981.41	2,58,228
Net NPAs as percent of Net Advances					
2017-18	8.0	2.4	0.4	-	6.0
2018-19	4.8	2.0	0.5	1.0	3.7
2019-20	3.75	1.55	0.49	0.9	2.8
2020-21	3.09	1.42	0.76	2.75	2.4

Source: Annual accounts of banks and off-site returns (global operations), RBI

Note: 1. *: Includes IDBI Bank Ltd for closing balance for 2017-18 and opening balance for 2018-19.

2. ^: Includes IDBI Bank Ltd for addition, recovery, writing off and closing balance for 2018-19.

3. #: Data include six scheduled SFBs at end-March 2018 and seven scheduled

SFBs at end-March 2019.

4. **: Calculated by taking gross NPAs from annual accounts of respective banks and gross advances from off-site returns (global operations).

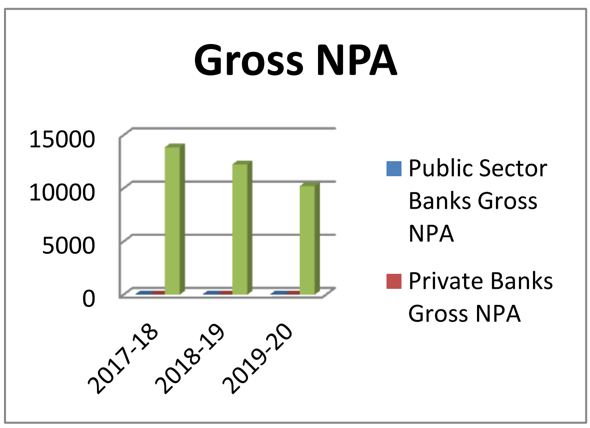
The most disturbing part is that frauds, especially the larger ones, tend to get reported with a lag of almost 22 months (as per the report of RBI). It was also observed that the lag time increases to 55 months in cases where the value of the bank fraud is more than ₹100 Crores. Thus, even though the number of cases of fraud reported by banks as well as the amount involved spiked during 2019-20 (**Table 3**), both would be trending lower, if, analyzed on the basis of the date of occurrence (**Table 4**). According to a report by the Reserve Bank of India, the government issued a framework for timely detection, reporting and investigation relating to frauds in PSBs in February 2018, which required them to evaluate NPA accounts exceeding ₹50 crores. This appears to have caused the sharp jump in reported frauds in 2018-19, however the number of frauds in various banking operations based on date of occurrence in 2019-20 decreased to 4493 and the amount decreased to Rs. 21,990 as compared to the previous year.

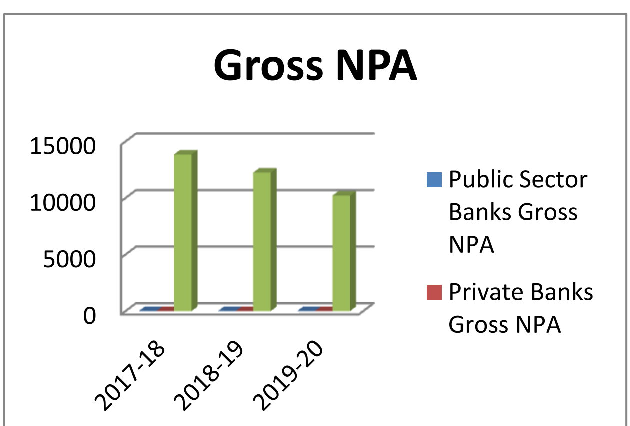
Bank frauds have been predominantly occurring in the loan portfolio, both in terms of number and value. Incidents relating to other areas of banking viz., card/internet, off-balance sheet and forex transactions, in terms of value, have reduced (in terms of date of reporting) in 2018-19 vis-à-vis the previous year. The modus operandi of large value frauds – that account for 86.4 per cent of all frauds reported during the year in terms of value – involved, inter alia, diversion of funds by borrowers through various means, mainly via associated or shell companies; accounting irregularities; manipulating financial or stock statements; opening current accounts with banks outside the lending consortium without a no-objection certificate from lenders; and devolving of Letter of Credits (LCs).

Table 3.1: Trends in non-performing assets -Bank Group-wise (Amount in Rs. Crore) Gross NPA Bank wise (Amt. in Crore) **Net NPA Bank Wise (Amt in crore)**

	Public Sector Banks		**Private Banks**		**Foreign Banks**	
	Gross NPA	**Net NPA**	**Gross NPA**	**Net NPA**	**Gross NPA**	**Net NPA**
2017-18	8,95,601	4,54,473	1,29,335	64,380	13,849	1,548
2018-19	7,39,541	2,85,123	1,83,604	67,380	12,242	2,050
2019-20	6,78,317	2,30,918	2,09,568	55,746	10,208	2,084
2020-21	616615.55	196450.81	200140.98	55808.98	15044.08	2986.80

Source: Indian Banks' Association





According to RBI's report, bank frauds in India have jumped 74 percent by value, driven by loan-related incidents. The total amount involved in fraudulent transactions rose to Rs 71,543 crore during the year 2018-19 and further increased to Rs 1,85,644 in 2019-20. Public sector banks accounted for 90 percent of these worth Rs 64,509 crore in 2018-19 over the amount involved in fraud cases in 2017-18 which was ₹38,261 crores. The next highest number of fraud cases in 2018-19 was reported by private sector banks followed by foreign banks. There were 2,090 cases of fraud in private sector banks where the total amount involved was ₹ 5,515 crores. Comparatively in 2017-18, the total cases reported by private sector banks were 1,975 and the total amount involved was tune of ₹ 2,478 crores. In other words, the amount involved in fraud cases in private banks increased by 122.5% in 2018-19 compared to 2017-18. Although the number of fraud cases involving foreign banks has come down in 2018-19 to 762 from 974 in 2017-18, the amount involved in these cases has nearly tripled. In 2017-18, the total amount was ₹ 256 crores while it increased to ₹ 955 crores in 2018-19. During the same period, the amount of bank fraud in financial institutions increased multifold with the amount for 2018-19 being ₹ 553 crores (28 cases) compared to ₹ 165 crores in 2017-18 (12 cases).

Table 4: frauds in Various Banking Operations Based on the date of reporting

(At end-March) (Cases in number and amount in ₹crore)

Particulars	2016-17		2017-18		2018-19		2019-20		2020-21	
	No.	Amount	No.	Amount	No.	Amount	No	Amount	No	Amt
Advances	2322	20561	2525	22558	3606	64548	4,610	1,82,051	3,501	1,37,023
Card/internet	1372	42	2059	110	1866	71	2,678	195	2,545	119
Deposits	695	903	691	457	593	148	530	616	504	434
Cash	239	37	218	40	274	56	371	63	329	39
Others	153	77	138	242	197	244	250	174	278	54
Cheques/ DD	235	40	207	34	189	34	202	39	163	85
Off-balance sheet	5	63	20	16288	33	5538	34	2445	23	535

Clearing accounts etc	27	6	37	6	24	209	22	07	14	4
Foreign exchange transactions	16	2201	9	1426	13	695	08	54	4	129
Non-resident accounts	11	3	6	5	3	0	0	0	0	0
Inter-branch accounts	1	1	6	1	3	0	02	00	2	0
Total	5076	22934	5916	41167	6801	71543	8,707	1,85,644	7,363	1,38,422

Source: RBI

Note: 1. Refers to frauds of Rs 1 lakh and above

2. The figures reported by banks and financial Institutions are subject to change based on revisions filled by them

3. Frauds reported in a year could have occurred several years prior to year of reporting.

4. Amounts involved reported do not reflect the amount of loss incurred. Depending on recoveries, the loss incurred get reduced. Further the entire amount involved is not necessarily diverted.

Table 4.1: Banking Frauds being reported (Consolidated banking Operations*)

Years	**Number**	**Amount involved**
2016-17	5,026	22,934
2017-18	5,916	41,167
2018-19	6,800	71,543
2019-20	8,707	1,85,644

Source: RBI (*includes public sector, private sector banks, foreign banks, Small finance banks, financial institutions, Payment banks and Local area banks)

Table 5: frauds in Various Banking Operations Based on the date of Occurrence (At end-March) (Cases in number and amount in ₹crore)

Particulars	2016-17		2017-18		2018-19		2019-20	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Advances	1265	9550	1994	22,793	1705	29,565	1023	21,455
Card/Internet	1367	40	2168	105	2050	80	2463	119
Deposits	602	665	583	345	521	137	361	191
Cash	276	41	214	39	270	53	342	31
Others	132	50	162	169	172	51	113	123
Cheques/ DD	217	33	210	41	158	26	174	62
Off-balance sheet	13	15023	11	1143	18	2924	1	1
Clearing, etc accounts	29	7	36	9	22	206	10	1
Foreign exchange transactions	15	473	5	83	5	145	6	7
Non-resident accounts	7	1	5	4	1	0	-	-
Inter-branch accounts	4	1	3	0	3	0	-	-
Total	**3,927**	**25,884**	**5336**	**24725**	**4,924**	**33,187**	**4493**	**21,990**

Source: Report on trends and progress, 2020

Notes: 1. Refers to frauds of ₹1 lakh and above.

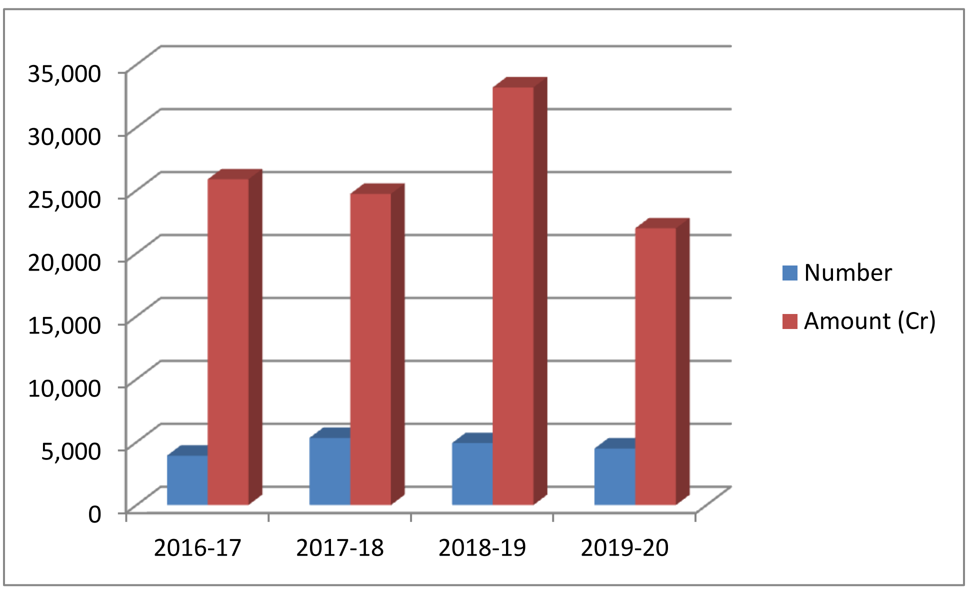
2. The figures reported by banks & FIs are subject to change based on revisions filed by them.

3. Data based on 'date of occurrence' may change for a period of time as frauds reported late but having occurred earlier would get added. For example, for frauds occurring in 2016-17, the data generated as on April 1, 2018 would be different from the one generated on April 1, 2019 because the frauds reported

between April 1, 2018 and March 31, 2019 but occurred in the year 2016-17 get added in latter report.

Table 5.1: Banking frauds Occurred (Consolidated Banking Operations)

	Number	Amount (Cr)
2016-17	3,927	25,884
2017-18	5336	24725
2018-19	4924	33187
2019-20	4493	21990



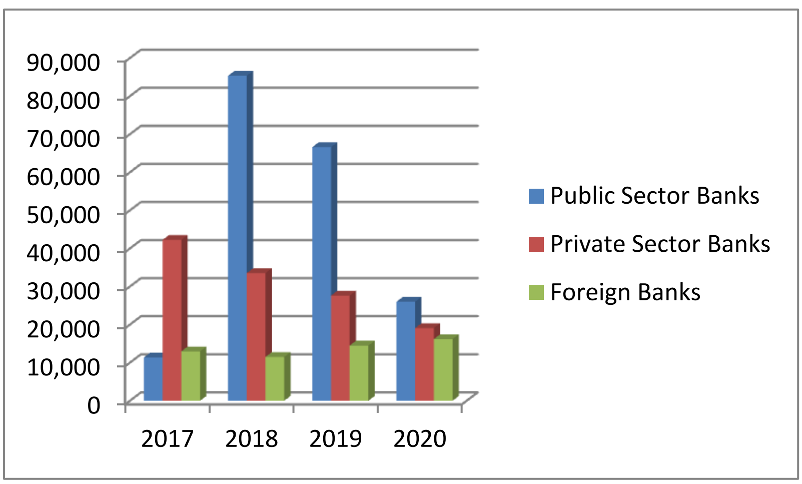
Impact of bank frauds on Indian Economy

1. Profitability of banks

It is evident from **table 5** that the net profits of PSBs and private sector banks have declined. The net profits of public sector banks have shown a sharp increase in 2018 whereas in 2019 and 2020, it has declined to Rs. 66,608 crore and Rs. 26016 crore. Similarly, the private sector banks also have shown decrease in the net profits. It is only the foreign banks which have shown increase in net profits in the year 2019 and 2020, as compared to the previous year. The major reason for decrease in Net Profits of banks is loans turning out into NPAs.

Table 6 : Net Profits earned by banks (in Crore)					
	2017	**2018**	**2019**	**2020**	**2021**
Public Sector Banks	11,388	85,371	66,608	26016	
Private Sector Banks	42,247	33,545	27,621	19111	
Foreign Banks	12,984	11,516	14,507	16197	

Source: Indian Banks' Association



2. **Sufferings by customers**

Indian banking system is passing through a tough time. The banking sector has huge Non- Performing Assets (NPA). On top the credit related frauds have the maximum impact in all the banking frauds in India because of the high amount involved and the tedious process of fraud detection. The frauds may be primarily due to lack of adequate supervision of top management, faulty incentive mechanism in place for employees, corporate borrowers, weak regulatory system and lack of coordination among different banks across India and abroad and so on. In all these loss of money by the banks, ultimately the major suffering is by the customers of the banks. The recent example which came in light was the case of Punjab & Maharashtra Cooperative (PMC) Bank. The total amount of the PMC bank fraud was Rs 4,355 cr. And the total NPA of the bank has grown to 73%. As a result, there was a sudden freeze in the withdrawals by the depositors. Thus, the mistake by the bank and its employees has to be borne by the customers.

3. Trust on Banks

Looking on the figures of NPAs, Profitability and number of bank frauds and the amount involved, the trust of people on the Indian banks is shattered and the reputation of the RBI is dented. Many fear that they might lose their lifetime earnings kept in savings accounts or in the form of fixed deposits. This is going to have a huge impact on the savings with the banks. The customers of banks will hesitate to save their hard-earned money with the banks and furthermore this will hamper credit creation by banks.

4. Creation of credit

The banks shall not be able to create credit if it does not have adequate deposits from the depositors/customers. This will surely going to affect the manufacturing units/industries/entrepreneurs to commence and grow their business. The export units will be devastated if they did not receive loaning facility thus, hampering exports in the country.

5. Increase in Fiscal Deficit

It is a known fact that the Government also requires short term and long term loans. This demand of funds by the government can be met by commercial banks. And if commercial banks will have no money/deposits with them, then the creation of credit will be a hard dream to fulfill. This shall increase fiscal deficit of the government and eventually will run out of reserve holdings and the currency may have to depreciate against foreign currencies.

6. Fall in overall capacity of banks

Though banks have indulged in various frauds since long but during last 4-5 years, huge frauds and financial misconduct have been unearthed in public sector banks, private banks and foreign banks. Though the numbers are great in PSBs, these frauds undoubtedly will decrease the capacity of banks in every aspect whether it is providing funds, people taking advantage of banks, declining the goodwill of banks, shattering of the image and so on.

7. Economic development

The banks have the legacy of more than three decades in serving to the cause of financial requirements of small and middle class - traders, small farmers, MSMEs, students, entrepreneurs etc. Certain powerful clients make use of banks as a channel to raise huge money by way of loans to fund their legal/illegal business interests. Some of these powerful clients later become defaulters and do not pay off their borrowings. This gradually hampers the economic development of the country because the money gets concentrated in few big hands and banks become ineffectual in handling this financial crisis.

Findings and Conclusions

It is thus evident that post liberalization period, banks had witnessed ample growth opportunities but at the same time posed some serious challenges; one of them being rise in frauds and NPAs. Apparently, with the rise in fraudulent activities in banking sector, not only has generated loss for the banks but also affected their credibility. People have gradually lost the trust on banks which is directly affecting the credit creation by banks and thus the economic development is at stake. The major step taken by the banking sector could be taking proactive measures and procedures to avoid frauds and losses. And further the data analysis technology can be leveraged by banks to detect frauds at the initial stage itself and reduce their loss significantly.

It is further observed that the employees of banks indulge themselves into fraudulent activities along with the defaulters so as to have monetary gains. Thus, it is necessary on the part of bank employees to be honest and loyal. And also, the RBI need to be vigilant by creating one separate department which shall look into the working of the employees especially peer ones.

Adding further, the growth in number of frauds over the years is less whereas the growth in monetary value of frauds has shown tremendous increase which indicates that the frauds involving larger amounts have been happening in recent years. Though the advances granted by banks are promising but the rise in the number of frauds and Non- Performing Assets has severely affected the profitability of the banking sector in India. Thus, strict action by authorities along with finding new means of fraud prevention and reduction is the only way forward to safeguard the credibility of Indian banks and give a new face to the banking sector of the country.

More generally, frauds could worsen in times of slowdown. Firms may struggle for growth and falter and may fall under greater debts and further they may be tempted to engage in fraudulent activities. If this is the case, then more than regulation, policies encouraging growth may be needed to address India's fraud problem.

It is also observed that the banks in order to achieve business targets are pressurised to grant loans and advances. Thus, in order to do so the banks search for big parties for granting loans which may later turn into defaulters.

The following conclusions can be drawn from the study:

- Majority of frauds in the banking sector are related to advances which is a major cause of worry for banks in India.
- The amount involved in frauds has risen immensely in comparison to the increase in number of frauds.
- Frauds have a significant impact on Non- Performing Assets in the Indian banking sector, because the frauds later result in NPAs further affecting the profitability of banks, hence have larger impact on the economy.
- The Gross NPAs to Gross Advances Ratio has shown a rising trend over the years.

- The internal audit teams are expected to be more vigilant and specifically report in case of irregularities in banks and its branches. The teams should make in depth study of the corruption during the course of their inspection.

References

1. www.rbi.org.in
2. https://factly.in/
3. Report of Indian banks' Association
4. Gandhi, R. (2015), "Financial Frauds-Prevention: A Question of Knowing Somebody", 2nd National Conference on Financial Frauds Risks & Preventions organized by ASSOCHAM on June 26, 2015 at New Delhi.
5. Reserve Bank of India (2015a), "Framework for dealing with loan frauds", RBI Circulars.
6. Impact of Frauds on the Indian Banking Sector Ainsley Granville Andre Jorge Bernard, Brahma Edwin Barreto, Rodney D'Silva, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-7S2, May 2019
7. Indian Banking Fraud Survey, Business Standard, February
8. Ganesh, A. and Raghurama, A. (2008), "Status of Training Evaluation in Commercial Bank", Journal of Social Sciences and Management Sciences, Vol. 37(2), pp.137-58.
9. Khanna, A. and Arora, B. (2009), "A Study to Investigate the Reasons for Bank Frauds in Indian Banking Industry", Int. Journal of Business Science and Applied Management, Vol. 4 (3), pp. 1-21.
10. Pan, S. (2015), "An Overview of Indian Banking Industry", International Journal of Management and Social Science Research, Vol. 4 (5), pp. 67-71.
11. Reports on Progress of Indian Banking, Reserve Bank of India, 2017-19

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INFLUENCE OF ARTIFICIAL INTELLIGENCE (AI) ON CONSUMER BEHAVIOUR AND EXPECTATIONS IN THE FUTURE

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ABSTRACT

Consumer Behaviour *(CB) has undergone a significant transformation due to the advancement of artificial intelligence (AI) technology and its applications. It is vital to comprehend how consumer behaviour and its constituents—personality, attitude, engagement, decision-making, and trust are impacted by how consumers interact with these applications across various platforms and touchpoints. These subjects are at the centre of the rapidly expanding field of artificial intelligence and consumer behaviour (AI CB) study. To understand the vast body of literature, identify research gaps, and suggest future routes for academic study, a thorough evaluation is necessary to guide future investigations.*

This paper analyses more than 50 AI CB publications using bibliometric and framework-based approaches to fill this research gap. The analysis provides insights into publication trends, prevalent theories, techniques, antecedents, decisions, and consequences in the literature on AI CB. Its most significant contributions are the review's identification of research front clusters and the provision of a conceptual framework for ongoing investigations. The connection between AI and consumer behaviour aspects, such as consumer acceptance and trust, consumer contact and engagement, attitude and personality, decision-making, and adoption, is the subject of these clusters or topics.

Key Words: *Consumer Behaviour, Consumer Acceptance, Future Investigations, Advancement of Artificial Intelligence (AI)*

1. INTRODUCTION

Artificial intelligence (AI) has an expanding influence on people's daily lives and society. Like many other potent technologies, artificial intelligence significantly alters consumer behaviour. The impact of AI on businesses' interactions with customers has altered consumer behaviour and influenced their purchasing decisions. This article aims to examine certain presumptions regarding the impact of artificial intelligence on consumer expectations, the increasing need for data privacy, and the emergence of ethical consumerism in the AI era.

By using cutting-edge technology like artificial intelligence (AI), we can provide our consumers with extraordinary, personalized services. Businesses can now more accurately anticipate client wants because of artificial intelligence's capacity to analyze massive amounts of data and spot unusual patterns. The need for highly personalized services and the development of AI are mutually exclusive. Customized experiences that cater to individual wants and tastes, such as personalized product recommendations and customer service, enable firms to establish closer bonds with their customers. However, in the era of fast-evolving technological advances, it is essential for businesses to constantly assess consumer preferences and provide ever-more specific and superior products and services if they want to remain relevant and competitive in the AI-driven market.

2. REVIEW OF LITERATURE

Consumer purchasing behaviour is greatly impacted by artificial intelligence (AI), which is rapidly changing the online-marketing sector. The current body of research on how AI affects consumer behaviour is examined in this overview of the literature, with an emphasis on a variety of AI applications, including chatbots, personalized recommendations, predictive analytics, and social media interactions. In addition to identifying gaps and suggesting future research areas, the review attempts to synthesize current data and offer possibilities for additional study. In online retail, personalization is one of the most common uses of AI. AI systems use customer data to generate customized shopping experiences. Bhagat et al.'s research (2022) showed that AI positively influences consumer purchase intentions by sending tailored marketing messages and personalized recommendations. Based on each customer's unique preferences and behaviour, personalized product recommendations improve the shopping experience and raise the possibility that a purchase will be made. According to Mussa (2020), using AI at every stage of the customer journey—from identifying needs to predicting post-purchase behaviour—significantly predicts the online platform's customers' purchasing behaviour.

The study found that AI-driven personalization leads to higher consumer satisfaction and loyalty, reinforcing the importance of AI in creating engaging and personalized shopping experiences. AI-powered chatbots have become an integral part of customer service in online retail. Chatbots provide real-time assistance, answer queries, and offer product recommendations, enhancing consumer engagement and satisfaction. Nichifor et al. (2021) investigated the impact of chatbots on consumer journeys in online retail and found that high-quality chatbot interactions significantly improve customer satisfaction. Jain and Khurana (2022) explored the relationship between AI-enabled chatbots and consumer buying behavior, emphasizing the importance of chatbots in enhancing pre-purchase, purchase, and post-purchase experiences. The study suggested that chatbots, by providing personalized interactions and immediate support, play a crucial role in influencing consumer decisions and enhancing overall shopping experiences. Predictive analytics, powered by AI, allows retailers to anticipate consumer needs and optimize inventory management. Sharma (2023) analyzed the role of AI in predicting customer behavior and personalizing the shopping experience in e-commerce.

The study found that AI significantly improves the accuracy of predicting customer behavior, which in turn enhances conversion rates through personalized recommendations. Xiong (2022) examined the impact of AI and the digital economy on consumer online shopping behavior, finding that AI-driven predictive analytics helps retailers understand market trends and consumer preferences. This capability allows for more effective inventory management and better alignment of supply with consumer demand, reducing the risks of stockouts and excess inventory. AI also impacts impulse buying behavior by analyzing real-time data and identifying moments when consumers are more likely to make spontaneous purchases. Jain and Gandhi (2021) explored the effect of AI on impulse buying behavior in Indian fashion retail outlets and found that AI-driven strategies significantly increase impulse purchases. Ruby et al. (2023) conducted a bibliometric analysis of online impulse buying Journal of Infrastructure, Policy and Development 2024, 8(9), 7700. 5 behavior, suggesting that AI technologies such as personalized recommendations and targeted promotions play a critical role in influencing impulse buying decisions. This research highlights the potential of AI in driving sales through impulse purchases by strategically presenting relevant products to consumers. The integration of AI with social media platforms has transformed online retail marketing strategies.

The broader implications of AI technologies in online retail are profound, influencing various aspects of consumer behavior and business strategy. AI's ability to analyze vast amounts of data enables retailers to develop more effective recommendation systems, thereby increasing sales and customer satisfaction. For instance, Mussa (2020) highlights AI's high capability to predict and explain consumer purchase behavior in Egypt's online retail sector (Mussa, 2020). Moreover, AI-driven personalization not only enhances customer engagement but also fosters loyalty and repeat purchases, as noted by Raji et al. (2024), in their review of market trends. Additionally, AI's role in social media engagement strategies has been found to significantly enhance consumer purchase frequency and spending patterns, underlining the importance of integrating ethical considerations and transparent practices to build consumer trust (Wen et al., 2022). These studies collectively underscore the transformative impact of AI on consumer behavior, highlighting the necessity for retailers to leverage AI technologies ethically and strategically.

3. OBJECTIVE OF THE STUDY

The objective of this study is to examine how artificial intelligence (AI) impacts consumer behavior and shapes consumer expectations for the future. The study aims to explore:

- Identifying which AI technologies (such as chatbots, recommendation systems, virtual assistants, etc.) are influencing consumer decision-making, purchasing behavior, and engagement.
- Analyzing how AI tools are changing consumers' purchasing patterns, preferences, and interaction with brands, including personalization, convenience, and trust.
- Assessing how AI is likely to shape consumer expectations in terms of product customization, customer service, data privacy, and brand transparency.
- Understanding how these AI-driven changes in consumer behavior and expectations could affect business strategies, product development, marketing, and customer service approaches.
- Potential Challenges and Opportunities that businesses face when integrating AI into their consumer engagement strategies.

4. RESEARCH METHODOLOGY

This study is based on both ***quantitative*** and ***qualitative techniques***, combining the sequential or concurrent use of quantitative and qualitative methods based on ***secondary data***. The purpose of the study is to examine the impact of AI on consumer behaviour and future customer expectations, offering a more comprehensive understanding.

5. HYPOTHESIS

- **Hypothesis (H1):** AI-powered recommendations (such as personalized product suggestions) significantly influence consumer purchasing decisions, increasing both the likelihood and frequency of purchases.

- **Null Hypothesis (H0):** AI-powered recommendations have no significant influence on consumer purchasing decisions and do not affect the likelihood or frequency of purchases.

These hypotheses (to know the impact of AI on consumer behaviour) will be tested using consumer surveys, experiments, and secondary data analytics.

6. ARTIFICIAL INTELLIGENCE (AI)

Artificial Intelligence (AI) is the term used to describe how technology, especially computer systems, can simulate human intelligence processes. It includes building machines that can carry out operations that ordinarily call for human intellect, like:

- **Learning:** Acquiring knowledge and skills from data through algorithms that improve over time (e.g., machine learning).
- **Reasoning:** Applying logic to make predictions, conclude, or make decisions, often using techniques like natural language processing or decision trees.
- **Problem-solving:** Developing algorithms to navigate complex situations, often by identifying the optimal path or solution.
- **Perception:** Interpreting sensory data, like images or sounds, using techniques in computer vision and speech recognition.
- N**atural Language Processing (NLP):** Understanding and generating human language, which enables chatbots, virtual assistants, and language translation software. Consumer Expectations for Personalized Experiences.

7. CONSUMER BEHAVIOR

Consumer behavior is the study of how individuals, groups, or organizations make decisions to select, purchase, use, and dispose of goods, services, ideas, or experiences. It combines elements from psychology, sociology, social anthropology, marketing, and economics to understand what influences consumers' actions and preferences. Here are some core aspects and factors influencing consumer behavior:

7.1 Psychological Factors

- **Motivation:** Driven by needs and wants, motivation is a core factor in consumer behavior. Maslow's hierarchy of needs, for example, suggests that people have a range of needs, from basic (e.g., food and shelter) to complex (e.g., self-actualization), and their purchases often reflect these needs.
- **Perception:** How consumers perceive information affects their decision-making. Perception influences how consumers interpret messages, form attitudes, and build brand associations.
- **Learning:** Past experiences shape future buying behavior. For instance, positive past experiences with a brand can lead to repeat purchases.
- **Beliefs and Attitudes:** Consumer attitudes toward brands, products, or services significantly impact their choices. Over time, consumers develop beliefs about brands that shape their expectations and purchasing patterns.

7.2 Social Factors

- **Family Influence:** Family members often influence purchase decisions, especially for products intended for household use, such as food, furniture, or children's products.
- **Social Groups:** Consumers are influenced by friends, colleagues, and other groups with whom they associate. People often look to reference groups to guide their behavior, such as buying what others in their circle endorse.
- **Social Status and Roles:** People's purchasing decisions may also reflect their social status or roles, such as professional roles, cultural roles, or

even generational identities. Each role comes with different expectations, which affect preferences and spending behavior.

7.3 Cultural Factors

- **Culture:** Culture shapes values, beliefs, and preferences. For example, a society that values sustainability may encourage consumers to buy eco-friendly products. Cultural shifts can also drive trends, like the growing popularity of plant-based diets.
- **Subculture:** Within broader cultures, there are subcultures based on religion, ethnicity, age, etc., which create distinct consumer preferences and behaviors.
- **Social Class:** Social class impacts behavior through access to resources and perceived societal roles. People in higher social classes may favor luxury items, while lower-income groups may prioritize affordability.

7.4 Personal Factors

- **Age and Life Stage:** Consumer needs change with age and life stage. Young adults might prioritize tech gadgets, while families may focus on home goods, and retirees may be interested in healthcare products or travel.
- **Occupation and Economic Situation:** A person's job and financial situation directly affect their buying power and choices. Someone with a higher income may be able to afford luxury goods, while someone in a lower-income bracket may focus on essential purchases.
- **Lifestyle:** Lifestyle choices, including hobbies, interests, and social activities, impact consumer behavior. For instance, someone with a fitness-focused lifestyle may be inclined to buy health foods and workout gear.
- **Personality and Self-Concept:** People often buy products that align with their self-image or personality. Someone with an adventurous personality

might be drawn to unique travel experiences, while a reserved individual might opt for more traditional purchases.

7.5 Economic Factors

- **Income Levels:** Disposable income determines purchasing power and influences consumer choices. High-income individuals may make discretionary purchases, while low-income consumers may prioritize essentials.
- **Economic Conditions:** Economic factors like inflation, recession, and unemployment rates impact consumer spending habits. In uncertain economic times, people tend to save more and spend less, while in stable conditions, they may spend more freely.
- **Credit Availability:** The ability to borrow money (e.g., through credit cards or loans) influences consumer purchasing behavior. When credit is readily available, consumers are more likely to make significant purchases, such as homes, cars, or electronics.

7.6 Technological Factors

- **Digital Influence:** The rise of digital media and e-commerce has transformed consumer behavior. Consumers today research products online, read reviews, and compare prices before making a purchase.
- **Influence of AI and Personalization:** AI-driven personalized recommendations and targeted advertisements significantly influence consumer decisions, offering suggestions based on browsing history, past purchases, and preferences.
- **Product Innovation:** New technologies and product improvements drive consumer interest. For instance, advances in smartphone technology can lead to increased consumer demand for the latest models.

7.7. Situational Factors

- Physical Environment: Store layout, ambiance, and even music can affect purchasing decisions. For example, an inviting store atmosphere might encourage customers to linger and buy more.
- Time: Time constraints can impact decisions, such as when consumers buy quick and convenient options due to limited time.
- Purchase Occasion: Special occasions, such as holidays, birthdays, or weddings, often encourage increased spending and influence what consumers buy.

7.8 Consumer Decision-Making Process

The consumer decision-making process typically involves five stages:

- **Problem Recognition:** The consumer realizes they have a need or problem.
- **Information Search:** They seek information about possible solutions or products.
- **Evaluation of Alternatives:** Consumers compare various options, considering factors like price, quality, and features.
- **Purchase Decision:** After evaluating alternatives, the consumer makes a purchase decision.
- Post-Purchase Behavior: After the purchase, consumers reflect on their satisfaction, which affects future buying decisions and loyalty to the brand.

8. ARTIFICIAL INTELLIGENCE AND CONSUMER BEHAVIOUR

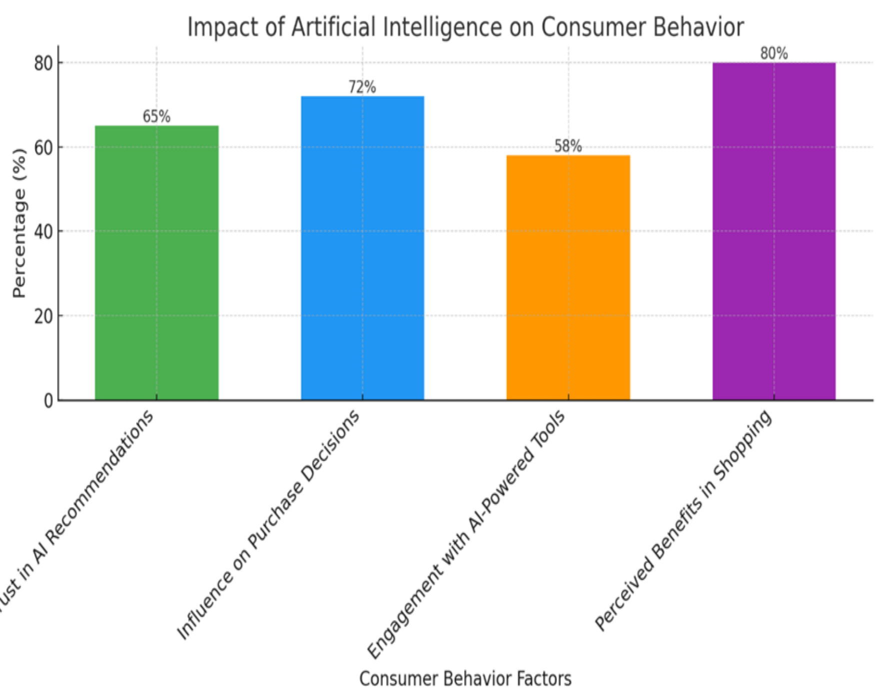
Here's some specific statistical data on the impact of artificial intelligence (AI) on consumer behavior across various sectors:

Category	Statistics	Sources / Studies
Personalization and Consumer Loyalty	**80%** of consumers are more likely to buy from brands offering personalized experiences.	Epsilon, Accenture
	AI-based personalization can boost customer satisfaction by **20%** and improve conversion rates by **10-15%**.	McKinsey, Forbes
AI-Powered Product Recommendations	AI-driven recommendations account for **35%** of purchases on Amazon and Netflix.	Amazon, Netflix
	76% of consumers feel frustrated when not offered personalized experiences.	McKinsey
AI Chatbots and Customer Support	The global chatbot market is projected to reach **$9.4 billion** by 2024.	Grand View Research
	67% of global consumers used a chatbot in 2022.	Salesforce
	AI chatbots can handle up to **80%** of routine inquiries, achieving an average customer satisfaction rate of **90%**.	IBM
Predictive Analytics and Consumer Insights	**70%** of companies utilize AI for predictive analytics to enhance consumer targeting.	PwC, Deloitte

	Predictive analytics can reduce churn by **20-30%** and improve demand forecasting accuracy by **10-20%**.	McKinsey, PwC
Voice Search and Smart Assistants	**40%** of adults use voice search at least once daily, with AI-powered assistants like Alexa and Siri playing a major role.	Google, Adobe Analytics
	Voice shopping is projected to grow to a market value of **$40 billion** by 2025.	OC&C Strategy Consultants
Augmented Reality (AR) and Visual Search	**66%** of consumers show interest in AI-powered virtual try-ons, especially for fashion and beauty.	Nielsen, Statista
	Visual search increases brand engagement by **25%** and helps reduce return rates by **20-30%**.	Gartner, Snap Inc.
Consumer Data Privacy Concerns	**70%** of consumers are concerned about how companies use AI to collect and handle data.	Deloitte
	60% expect transparency from brands on AI data processing, influencing loyalty and trust.	Accenture, Edelman Trust Barometer

Here's a bar chart representing the impact of artificial intelligence on consumer behavior across four categories:

Sr. No.	Categories	Percentage (%)
1.	**Trust in AI Recommendations**	65%
2.	**Influence on Purchase Decisions**	72%
3.	**Engagement with AI-Powered Tools**	58%
4.	**Perceived Benefits of Shopping**	80%



This chart visualizes secondary data showing how AI affects consumer trust, purchase decisions, engagement, and perceived benefits in shopping experiences.

9. ARTIFICIAL INTELLIGENCE AND BUSINESS TRENDS

Businesses are turning to AI to a greater degree to improve and perfect their operations. According to the Forbes Advisor survey, businesses are using AI across a wide range of areas. The most popular applications include customer service, with 56% of respondents using AI for this purpose, and cybersecurity and fraud management, adopted by 51% of businesses.

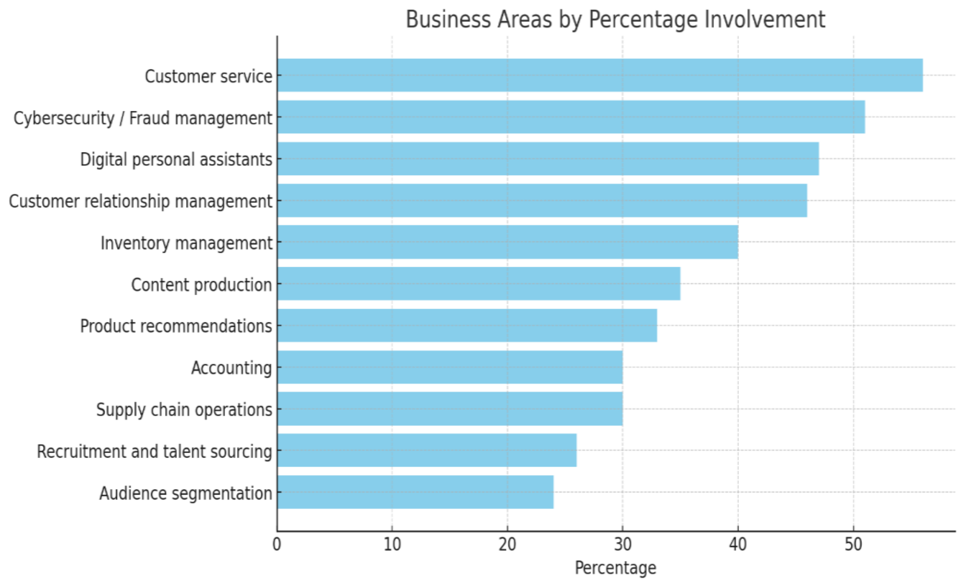
Other notable uses of AI are customer relationship management (46%), digital personal assistants (47%), inventory management (40%) and content production (35%). Businesses also leverage AI for product recommendations (33%), accounting (30%), supply chain operations (30%), recruitment and talent sourcing (26%) and audience segmentation (24%).

Forbes Advisor surveyed business owners to find out how they currently use or plan to use AI within their business:

Customer service	56%
Cybersecurity / Fraud management	51%
Digital personal assistants	47%
Customer relationship management	46%
Inventory management	40%
Content production	35%
Product recommendations	33%
Accounting	30%
Supply chain operations	30%

Recruitment and talent sourcing	26%
Audience segmentation	24%

Here's the bar chart displaying the business areas and their respective percentages.



Source: Forbes Advisor Embed

10. CONSUMER BEHAVIOUR AND EXPECTATIONS IN THE FUTURE

The future of consumer behavior and expectations is set to be shaped by rapid technological advancements, growing awareness of environmental and social issues, and the ongoing digital transformation. Here are key trends likely to influence consumer behavior and expectations in the coming years:

- **Hyper-Personalization**

  Consumers will expect highly personalized experiences tailored to their needs, preferences, and moods. AI and machine learning enable brands to deliver unique, data-driven recommendations, products, and services.

  Consumers are likely to favor brands that make them feel uniquely understood, increasing demand for brands that leverage personalization.

- **Demand for Ethical and Sustainable Choices**

  Growing concern for environmental and social responsibility will lead consumers to seek brands that prioritize sustainability and ethical practices. Rising awareness of climate change and social issues has prompted consumers to support companies that align with their values.

  Green and socially conscious brands may gain a competitive edge, while brands perceived as unsustainable or unethical may face consumer backlash.

- **Digital-First and Omnichannel Experiences**

  Consumers will expect seamless transitions between digital and physical touchpoints, allowing them to shop and interact with brands through multiple channels. Increased online shopping, social media integration, and the availability of digital payment options drive the need for omnichannel strategies.

  Businesses will need to invest in consistent and cohesive customer experiences across all channels, whether it's online, in-store, or mobile.

- **Instant Gratification and On-Demand Services**

  As life becomes more fast-paced, consumers will expect quick and convenient service, whether it's same-day delivery, quick responses from customer service, or real-time updates. The rise of gig economy platforms and advancements in logistics (like drone deliveries) are shaping expectations for instant service.

  Speed and convenience will become deciding factors for customer loyalty, especially in competitive sectors like retail and food delivery.

- **Privacy and Data Security Concerns**

  With increasing digital engagement, consumers are becoming more cautious about data privacy and are looking for brands that prioritize their security.

Increased data breaches, regulatory changes, and public awareness of privacy risks have elevated concerns over personal data handling.

Brands will need to be transparent about their data policies and invest in robust security to retain consumer trust.

- **Rise of Immersive and Experiential Shopping**

  Consumers will seek more immersive shopping experiences, utilizing augmented reality (AR), virtual reality (VR), and other digital tools. AR and VR technologies allow consumers to virtually "try before they buy," creating interactive and engaging shopping experiences.

  Retailers, particularly in fashion, home decor, and automotive industries, will benefit from implementing immersive experiences to attract tech-savvy consumers.

- **Health and Wellness as a Priority**

  A heightened focus on health will drive demand for products and services that promote wellness, from organic foods to mental health apps. The COVID-19 pandemic has intensified interest in physical and mental health, pushing consumers to prioritize products that support a healthy lifestyle.

  Brands that emphasize wellness benefits in their products and services may see stronger consumer engagement and loyalty.

- **Community and Purpose-Driven Consumption**

  Consumers will seek brands that provide a sense of community and purpose, supporting causes and connecting people with similar values. Increasing social isolation and a desire for meaningful interactions have fueled the popularity of brands that foster a sense of belonging.

  Purpose-driven brands with strong values, charitable initiatives, or local engagement may attract loyal consumer bases that resonate with their mission.

- **Subscription and Membership Models**

More consumers are expected to prefer subscription-based or membership services that offer exclusive benefits or convenience. The popularity of streaming services, meal kits, and subscription boxes has demonstrated the appeal of paying for ongoing value rather than one-time purchases.

Subscription-based business models could lead to higher customer retention, as they provide consistent, curated, or exclusive offerings that maintain engagement.

- **Rise of Autonomous Shopping**

Autonomous shopping (e.g., cashier-less stores, AI-driven recommendations) will become more prevalent, allowing consumers to shop with minimal human intervention. Advances in AI and robotics are making self-service shopping experiences possible, enhancing convenience, and reducing wait times.

Automation will redefine customer service, pushing brands to focus on creating self-service environments where consumers feel empowered to handle transactions independently.

11. CONCLUSION

The above study and data analysis have proven the hypothesis (H1) that Artificial intelligence (AI) is having a bigger and bigger impact on our society and daily life. AI is having a big impact on consumer behaviour, much like a lot of other powerful technology. AI changes the way companies communicate with their clients, impacting their decisions to buy and changing their behaviour in the process.

Consumer behavior is influenced by a combination of psychological, social, cultural, personal, and economic factors. Understanding these factors helps businesses tailor their marketing strategies, create products that meet consumer needs, and build lasting relationships. The decision-making process also highlights the journey a consumer goes through, providing insights for marketers to influence and engage consumers at each stage.

The future of consumer behavior will be characterized by a greater emphasis on personalization, sustainability, instant service, immersive experiences, and privacy. Businesses that adapt to these AI-based technologies like evolving expectations by leveraging technology, embracing ethical practices, and focusing on customer-centric strategies will be best positioned to build lasting consumer relationships.

12. REFERENCES

- Bhagat, R., Chauhan, P., & Bhagat, N. (2022). Influence of AI on consumer purchase intentions through personalized recommendations. Journal of Retailing and Consumer Services, 64, 102746.
- Bedi, P., Bedi, P., & Singh, J. (2022). AI-driven personalization and consumer loyalty: A comprehensive study. International Journal of Retail & Distribution Management, 50(3), 339–354. Das, G., Pradhan, S., & Chaudhury, S. (2022). Impact of AI and social media engagement on online buying behavior: A framework. Journal of Business Research, 139, 339–348. https://doi.org/10.1108/IJRDM-09-2021-0347
- Jain, R., & Khurana, A. (2022). Enhancing consumer experience with AI-powered chatbots in online retail. Journal of Business Research, 138, 378–389.

  Jain, R., & Gandhi, A. (2021). The impact of AI on impulse buying behavior in fashion retail: An empirical study in India. Journal of Fashion Marketing and Management, 25(4), 543–560. https://doi.org/10.1108/JFMM-02-2020-0014
- Jangra, V., & Jangra, D. (2022). Ethical implications of AI in online shopping: Safeguarding consumer data. Ethics and Information Technology, 24(1), 83–99. https://doi.org/10.1007/s10676-021-09582-9

- Mussa, M. (2020). Predicting consumer purchase behavior using AI: A comprehensive analysis. Journal of Retailing and Consumer Services, 57, 102224.
- Mussa, M. H. (2020). The impact of Artificial Intelligence on Consumer Behaviors an Applied Study on the Online Retailing Sector in Egypt. Journal of Shopping and Economics, 10(4), 128–145. https://doi.org/10.21608/jsec.2020.128722
- Nichifor, E., Trifan, E., & Nechifor, A. (2021). The impact of chatbots on consumer journeys in online retail. International Journal of Retail & Distribution Management, 49(7), 950–966. https://doi.org/10.1108/IJRDM-10-2020-0421
- Raji, M. A., Olodo, H. B., Oke, T. T, et al. (2024). E-commerce and consumer behavior: A review of AI-powered personalization and market trends. GSC Advanced Research and Reviews, 18(3), 066–077. https://doi.org/10.30574/gscarr.2024.18.3.0090
- Ruby, R., Gokulakrishnan, K., & Sasikumar, D. (2023). AI technologies and online impulse buying behavior: A bibliometric analysis. Journal of Retailing and Consumer Services, 67, 103006.
- Sharma, P. (2023). The role of AI in predicting customer behavior and personalizing the shopping experience. Journal of Business Research, 144, 256–270. https://doi.org/10.1016/j.jbusres.2022.11.006
- Tiutiu, A., & Dabija, D. C. (2023). Ethical considerations and customer-friendly technology in AI-driven social media engagements. Technology in Society, 75, 102190. https://doi.org/10.1016/j.techsoc.2023.102190
- Wen, H., Zhang, L., Sheng, A., et al. (2022). From "Human -to-Human" to "Human-to-Non-human"—Influence Factors of Artificial Intelligence-Enabled Consumer Value Co-creation Behavior. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.863313

- Xiong, L. (2022). Impact of AI and the digital economy on consumer online shopping behavior. Computers in Human Behavior, 130, 107197. https://doi.org/10.1016/j.chb.2021.107197
- https://www.academia.edu/51071773/ARTIFICIAL_INTELLIGENCE_IN_DIGITAL_MARKETING_INFLUENCES_CONSUMER_BEHAVIOUR_A_REVIEW_AND_THEORETICAL_FOUNDATION_FOR_FUTURE_RESEARCH

Role of Social Entrepreneurship in Inclusive Growth

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ABSTRACT

The rising unemployment rate in the country is exacerbating the disparity between the wealthy and the poor, with many struggling to earn enough for basic survival. Over the past twenty years, significant changes have occurred globally, particularly with the emergence of social entrepreneurship. This approach not only addresses social issues but also incorporates profit-making elements into its framework. Social entrepreneurship aims to create social impact while generating revenue, and an increase in such ventures could help tackle current social challenges and improve the economy. Given the high number of people living below the poverty line, fostering social entrepreneurship is crucial for economic growth and enhancing living standards. This study examines the evolving landscape of social entrepreneurship in developing nations like India, exploring its current status and future potential. It also highlights how social entrepreneurship contributes to inclusive growth. Today, various organizations, including nonprofits, NGOs, foundations, governments, and individuals, are working to support and promote social entrepreneurs worldwide.

Keywords: *Social Entrepreneurship, Social Entrepreneur, Social Change*

"Social entrepreneurs are not content just to give a fish or teach how to fish. They will not rest until they have revolutionized the fishing industry."

— Bill Drayton.

INTRODUCTION

India's social entrepreneurship ecosystem is one of the most advanced globally, offering numerous opportunities to collaborate with local partners, learn from their experiences, and address various social challenges in sectors like education, agriculture, healthcare, renewable energy, manufacturing, and skill development. To effectively tackle these challenges, it is crucial to support and expand the ecosystem for social entrepreneurs, helping them bridge gaps caused by the pandemic, scale existing initiatives, and integrate into mainstream response systems. Since economic liberalization began in 1991, India has seen rapid growth, but social and environmental issues have also escalated, underscoring the need for multidisciplinary and entrepreneurial approaches to address these problems.

With approximately 22% of the population living below the poverty line, there is a significant gap in providing basic necessities. Social entrepreneurship, still in its early stages in India, presents a valuable tool for addressing these social issues by offering affordable goods and services. These enterprises aim to both serve society and generate profits, driving social change through innovative solutions to pressing problems. They provide essential products and services to those who cannot afford them otherwise, addressing needs in areas such as nutrition, education, and healthcare.

Social entrepreneurs are individuals with innovative approaches to solving society's most urgent issues, acting as catalysts for change. The growth of social entrepreneurship in India reflects a broader trend towards leveraging public-private partnerships to foster innovative solutions. As the country grapples with balancing GDP growth, inclusive development, and addressing challenges like education, energy efficiency, and climate change, social entrepreneurship is poised to play a pivotal role. The Impact Investors Council (IIC) reports that over USD 9 billion has been invested in more than 600 impact firms in India, benefiting 500 million lives. These social enterprises have improved education for over 226 million children and teenagers, reduced CO_2 emissions by more than 192 million tonnes, promoted social inclusion for over 25 million individuals, and provided electricity access to more than 100 million people.

OBJECTIVES OF THE PRESENT STUDY:

1. To analysed the role of social entrepreneurship in inclusive growth
2. To identify the status of social entrepreneurship in recent scenario

RESEARCH METHODOLOGY

This study is based upon information collected through secondary source. The required information has been gathered through web source, Journals, articles, research reports etc.

INCLUSIVE GROWTH

India can achieve sustainable development and build an egalitarian society by focusing on inclusive growth. Inclusive growth has four key elements: opportunity, capability, access, and security. Opportunity means that the economy should provide people with avenues to increase their income, offer diverse livelihood options, and enable steady income growth over time. Capability focuses on education and skill development, equipping people with the tools to enhance their abilities and make the best use of available resources. Access refers to ensuring that opportunities and resources are readily available to all citizens, enabling them to combine their skills with opportunities. Security is about providing people with the means to protect themselves against both short-term and long-term risks to their livelihoods.

ROLE OF SOCIAL ENTREPRENEURSHIP IN INCLUSIVE GROWTH

At the micro level, social entrepreneurs play a crucial role in driving inclusive growth. These entrepreneurs actively identify social challenges and continuously innovate to find effective solutions. According to Boschee, social entrepreneurs contribute to society through two types of enterprises: Direct-service Businesses and Affirmative Businesses. Affirmative businesses aim to create jobs and generate wealth for marginalized individuals who face physical, mental, economic, or educational disadvantages. By integrating these individuals into the economic mainstream, social enterprises act as agents of change. Direct-service businesses, on the other hand, promote development by offering care and training at the local level. This includes community-based initiatives such as job training, life skills instruction, and vocational training, as well as care services like child and adult care, support for the disabled, and maintenance of homes and gardens.

There are ample opportunities available in the following Sectors to create a social venture.

- Education Sector
- Agriculture Sector
- Healthcare Sector
- Renewable energy
- Skills Development
- Unorganized Sector

The Schwab Foundation for Social Entrepreneurship has impacted over 1 billion people in 190 countries from 2019 to 2022 and works with a community of over 450 global social entrepreneurs. These innovators are improving the social and economic quality of life, providing appropriate and increased access to healthcare, education, energy, finance and water.The impact of this community includes:

- 41 million people with improved healthcare
- 18 million young people with improved access to healthcare
- 15.3 million people empowered through better access to finance
- 10 million migrants and refugees supported
- 6 million empowered women
- 3.6 million with improved social and economic livelihoods through financial disbursements and capacity building
- 2.2 million young people with better access to education

According to recent study, it has found that, India has over 15 million entrepreneurs who focus on creating social and environmental change, especially in Urban India. Some of the social entrepreneurs in India are Anshu

Gupta (Goonj Organization), Chetna Sinha (Mann Deshi Bank), Neelam Chhiber (Rural Spark), and Vandana Goyal (Aajeevika Bureau).

STATUS OF SOCIAL ENTREPRENEURSHIP

Perfection is an elusive goal, and like many other countries, India faces its own set of challenges. However, over the past decade, the Indian government has remained committed to promoting inclusive development through various progressive initiatives, resulting in a thriving entrepreneurial ecosystem. According to government data, the number of recognized startups in India surged from 445 in 2016 to 86,713 in 2022. Indian social enterprises, driven by innovative approaches, have made significant progress in sectors such as education, healthcare, agriculture, renewable energy, manufacturing, and skill development. As of October 2022, the Department for Promotion of Industry and Internal Trade (DPIIT) reported that around 23% of social impact startups were working in healthcare and life sciences (7,537), education (5,309), agriculture (3,887), green technology (1,844), and social impact (500). India's rich cultural heritage, abundant resources, youthful and skilled workforce, supportive entrepreneurial ecosystem, and strong government initiatives have fostered this growth. Programs like the Startup India Scheme, ASPIRE, Atal Innovation Mission, NewGen Innovation and Entrepreneurship Development Centre, and the Venture Capital Assistance Scheme have significantly influenced the social enterprise sector. These initiatives could serve as global models for fostering social enterprises and promoting comprehensive socio-economic development.

India's push for self-reliance, particularly during the 'Amrit Kaal,' has enhanced its global standing. By supporting its citizens and making a global impact, India sets an example for other nations. A multi-stakeholder approach is essential, and countries like Chad and others in Africa could benefit by adopting similar models. Establishing mentorship programs and optimizing resources is crucial. Through strategic planning and partnerships with the private sector and civil society organizations, gaps in the social entrepreneurship ecosystem can be addressed. The 5E framework—Equality, Education, Effort, Empowerment, and Ecosystem Creation—could provide a strong foundation for advancing social entrepreneurship globally.

India faces both opportunities and challenges, with its younger generation more future-oriented and solutions-driven than before. Developing inclusive and sustainable models is vital as social enterprises gain recognition from both the public and private sectors across the continent. Social harmony can be a catalyst for sustainable local development. By focusing on skills development, training, education, knowledge exchange, and mentorship, India can accelerate progress towards the Sustainable Development Goals (SDGs).

In conclusion, social entrepreneurs and communities must harness their potential to drive rapid and sustainable socio-economic growth. India's younger generation is increasingly focused on addressing socio-economic challenges through social entrepreneurship, with a growing emphasis on creating enterprises that benefit both society and business. To advance this movement, India must build ecosystems that facilitate collaboration between governments and social entrepreneurs. With strategic cooperation and well-designed initiatives, social entrepreneurship can foster inclusive and sustainable development across the continent.

CONCLUSION

The landscape of social issues is evolving rapidly, even as progress is made in addressing many existing challenges. New problems continue to emerge each year, and the solutions cannot be based solely on traditional approaches. The most significant transformations are likely to come from applying an entrepreneurial mindset—one that embraces bold thinking, sets ambitious goals, and uses data-driven, iterative strategies.

In India, numerous social issues present opportunities for entrepreneurs to make a difference. These include tackling extreme poverty and hunger, ensuring universal education for children, promoting gender equality and women's empowerment, reducing child mortality, improving maternal health, and combating diseases such as HIV/AIDS and malaria. Addressing environmental issues like plastic pollution is also crucial. For social entrepreneurs, these problems represent opportunities to drive substantial change in social welfare systems.

Incremental improvements are not enough; entrepreneurs advocate for transformative change aimed at ambitious goals. Fostering and supporting social entrepreneurship can address societal problems often overlooked by commercial and government entities. To facilitate this, colleges and universities should develop programs that focus on training and educating social entrepreneurs, thereby contributing to positive social change.

REFERENCES

- Singh (2012). Social Entrepreneurship: A Growing Trend. International Journal of Innovations in Engineering and Technology.
- Dr. Hemantkumar P. Bulsara, D. S. (2015). Social Entrepreneurship in India: an exploratory study. International Journal of Innovation.
- Singh, N. (2015). Social Entrepreneurship in India and the development question: a sociological perspective. Research Gate.
- Satar, M. S. (2016). A Policy Framework for Social Entrepreneurship in India. Journal of Business and Management.
- Rawal, T. (2018). A study of Social Entrepreneurship in India. International Research Journal of Engineering and Technology.
- Sanchita Bansal, I. G. (2019). Social Entrepreneurship as a Path for Social Change and Driver of Sustainable Development: A Systematic Review and Research Agenda. MDPI.

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Impact of Immediate Mobile Payment Service (IMPS) on Customer Service

(with special reference to ICICI Bank in Varanasi city)

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Abstract

The paper looks at the pros and cons of IMPS (Immediate Payment Service) offered by banks in recent banking practices, focusing on ICICI Bank customers. The banking sector in India is growing rapidly, and people are increasingly interested in forming reliable relationships with banks. As a result, banks are offering many services. This growth could lead to faster payment systems, better investment options, and more convenient transfer methods. However, customers also face various issues, such as not knowing how to use the system, having their accounts blocked, and security concerns. Even though the banking industry is doing well in the country, these problems still exist.

***Keywords**: Online banking, Internet banking, Mobile Money Identifier MMID), National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), One Time Password (OTP)*

1. Introduction

Immediate Payment Service (IMPS) allows you to transfer money instantly between banks using mobile phones. It can also be accessed through ATMs and online banking. Most mobile fund transfers between banks currently use the NEFT system, which processes transactions in batches and isn't real-time. NEFT transactions are only processed during certain hours.

In August 2010, NPCI tested IMPS with banks like SBI, BOI, UBI, and ICICI. Yes Bank, Axis Bank, and HDFC Bank joined the pilot in the following months.

IMPS was officially launched on November 22, 2010, by Shyamala Gopinath, DG RBI, in Mumbai and is now available to the public.

Today, many people use online banking worldwide. To use online banking, you need to register with your bank, set up a password, and use different credentials from those for phone or mobile banking. Banks assign customer numbers that aren't the same as account numbers. One customer number can link to various accounts like checking, savings, loans, and credit cards.

Initially, mobile banking used SMS (known as SMS banking). With the rise of smartphones and mobile web in 1999, European banks started offering mobile banking through the web. Since then, mobile banking has evolved to use apps and web-based services. By 2012, over a third of banks had mobile device detection on their websites, leading to different options for mobile banking.

Customers can use online banking to check account balances, view recent transactions, pay bills, transfer funds, and download bank statements. Some banks also allow direct downloads into accounting software and other routine actions like ordering checkbooks or reporting lost credit cards.

In the late 1990s, many banks began offering web-based banking to reduce transaction costs and attract customers. By 2000, 80% of U.S. banks offered e-banking. Online banking grew steadily, with Bank of America leading the way with over 3 million online customers by 2001. Online customers were found to be more loyal and profitable.

NetBank, in the early 2000s, expanded its services by adding auto insurance, business credit cards, and mortgage services. They also introduced QuickPost for faster deposit processing and online safe deposit boxes. The company acquired several financial-related businesses and appointed a new CEO, Douglas K. Freeman, in 2001.

IMPS provides a fast, round-the-clock way to transfer money between banks in India via mobile, internet, and ATMs. It's a safe and cost-effective service managed by NPCI through its NFS switch.

2. Definitions

1. Fullerton India explains that IMPS stands for Immediate Mobile Payment Service or Interbank Mobile Payment Service. It's a way to transfer money instantly between banks using your mobile phone. With IMPS, you can quickly send money to Fullerton India.

2. ICICI Bank describes Immediate Payment Service as a system for instantly transferring money between banks using mobile phones.

3. Objectives of the study

a. To know the various facility used by customer by Immediate Mobile Payment System.

b. To know the usage of Mobile banking system in ICICI Bank.

c. To identify the role IMPS in exchange of money between banks.

d. To analyse the various qualitative functions of IMPS provided by ICICI Bank.

e. To identify the various challenges and difficulties faced by customers from IMPS.

f. To know the customers attitude and perception towards IMPS.

4. Methodology

The methodology adopted in this study depends on research problem and objective of the study. This study is based on both primary and secondary data. Primary data has been collected from the customers of ICICI Bank by Google form through questionnaire who are using Mobile banking in Varanasi city. Secondary data has been collected from various reports published by RBI and ICICI Bank.

5. Collection of data and sample of the study

This study based on the data collected by the customers through interview and questionnaires. Sample took for this study mostly lying as ICICI Bank customers and includes 50 numbers from the total population. Random sampling technique has been used for the study.

6. Limitations of the study

a. The study is confined to ICICI Bank only.

b. Respondents are from Varanasi city.

c. Sample has been collected in the month of January, 2024.

d. The study has been conducted within a limited period of time and budget.

7. Scope of study

This study focuses on ICICI Bank customers who use IMPS services. Records show that in 2008, mobile banking was becoming very popular. However, many customers were not very aware of how to use mobile banking services available in the banking sector. The goal of this study is to educate people about how to use IMPS, its benefits, and the methods involved. It also aims to help customers understand the advantages of mobile banking.

8. Review of Literature

1. Uppal R.K. (2010) studied mobile banking in India from 2000 to 2007. The study found that ATMs are the most effective e-channel, while mobile banking isn't very popular among public and old private sector banks. However, new private sector and foreign banks offer mobile banking well, with about 50% of their branches providing these services. Mobile banking customers are more common in e-banks, positively affecting the banks' profits and efficiency. Foreign banks lead in providing mobile banking services, followed by new private sector banks. The study also suggests ways to improve mobile banking services.

2. Aktan B., Teker E., and Erosy P. (2009) looked at how the internet was used in Turkey for financial services like banking, stock trading, and insurance between 2005 and 2008. They found that internet use in Turkey is growing quickly,

especially among the young population, and is increasingly used for financial transactions and services.

3. Ismail A., Abdullah M.M.B., and Sebastian K.F. (2009) studied how service quality features (like responsiveness, assurance, and empathy), perceived value, and customer satisfaction relate to each other in Malaysia. They surveyed 102 academic staff members at a Malaysian university. The study found that while perceived value doesn't significantly affect the relationship between responsiveness or assurance and customer satisfaction, it does enhance the effect of empathy on customer satisfaction.

9. Data Analysis

I. Do you use IMPS facility provided by the bank?

Table-1

Response	No. of Respondents (%)
Yes	67
No	33
Total	100

(Source: Primary Data)

Interpretation

The study shows that IMPS facility offered by the bank is very popular and it is being used by 67% customers.

2. Gender wise classification of the users of IMPS:

Table-2

User	No. of Respondents (%)
Male	64
Female	36
Total	100

(Source: Primary Data)

Interpretation

It is clear form table no. 2 that IMPS is more popular in male customers. 64% of male customers are using this service.

3. Frequency of using IMPS:

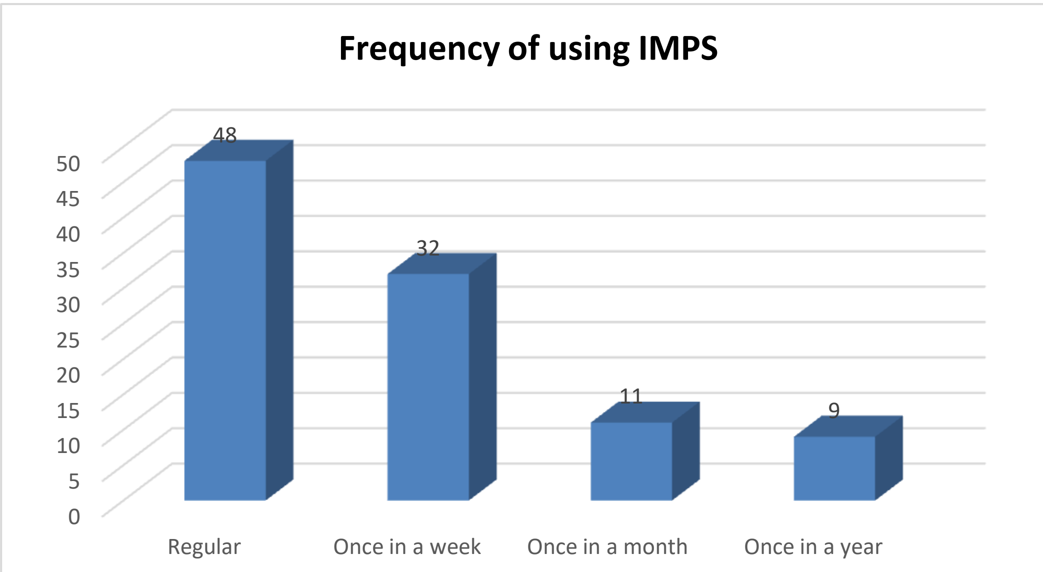

Table-3

Use of IMPS	Frequency (%)
Regular	48
Once in a week	32
Once in a month	11
Once in a year	09
Total	100

(Source: Primary Data)

Interpretation

It is clear from table no.-3 that most of the customers (48%) are using IMPS service on regular basis. 32% customers have used it once in a week. Only 9% customers used it once in a year.

4. IMPS is convenient and simple way of transferring funds:

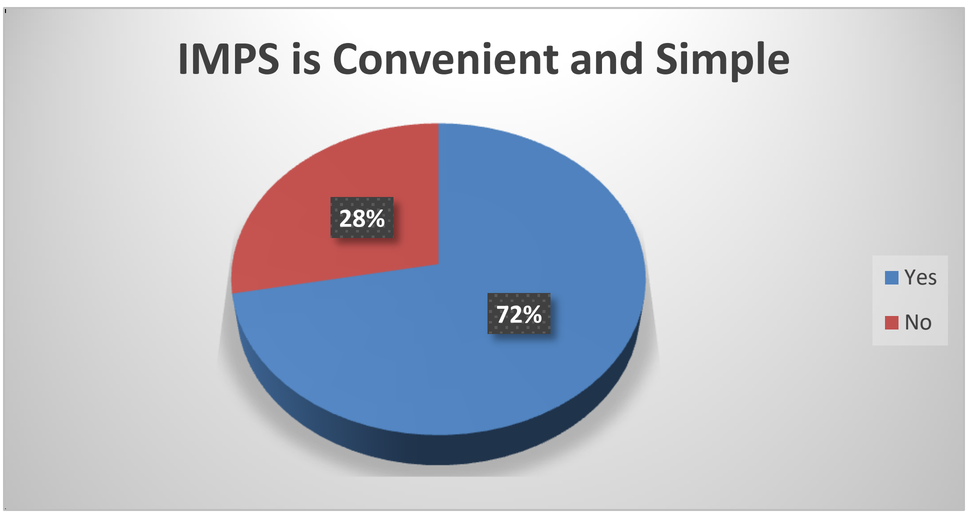

Table-4

Response	No. of Respondents (%)
Yes	72
No	28
Total	100

(Source: Primary Data)

Interpretation

IMPS service offered by ICICI bank is convenient and simple. It appears from table no.4 that 72% bank customers are of the same opinion.

5. Risk is involved in IMPS:

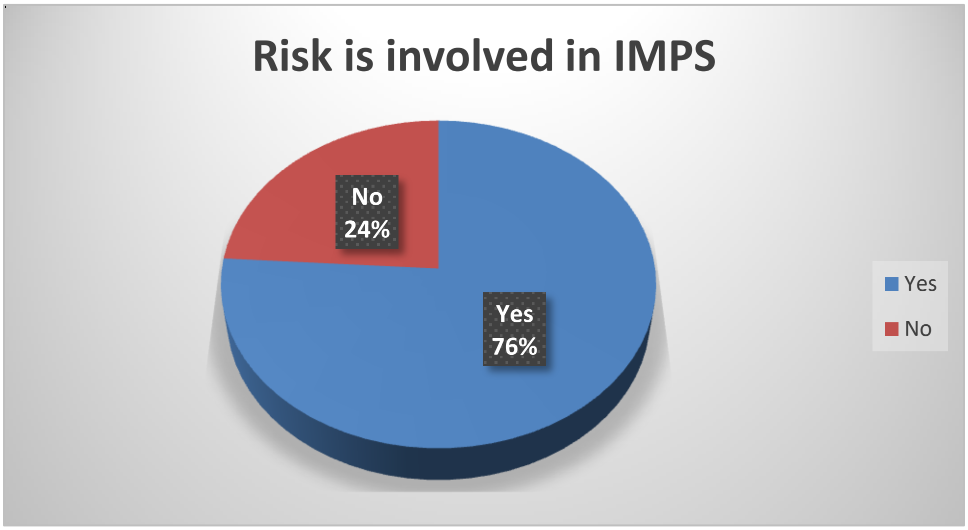

Table-5

Response	**No. of Respondents (%)**
Yes	76
No	24
Total	100

(Source: Primary Data)

Interpretation

Table no.-5 makes it clear that 76% customers are of the opinion that risk is involved in IMPS. The study shows that majority of the bank customers believe that there is risk in using IMPS service. Only 24% bank customers believe that there is no risk in using IMPS service.

6. Frequently used facility/service by customers through IMPS:

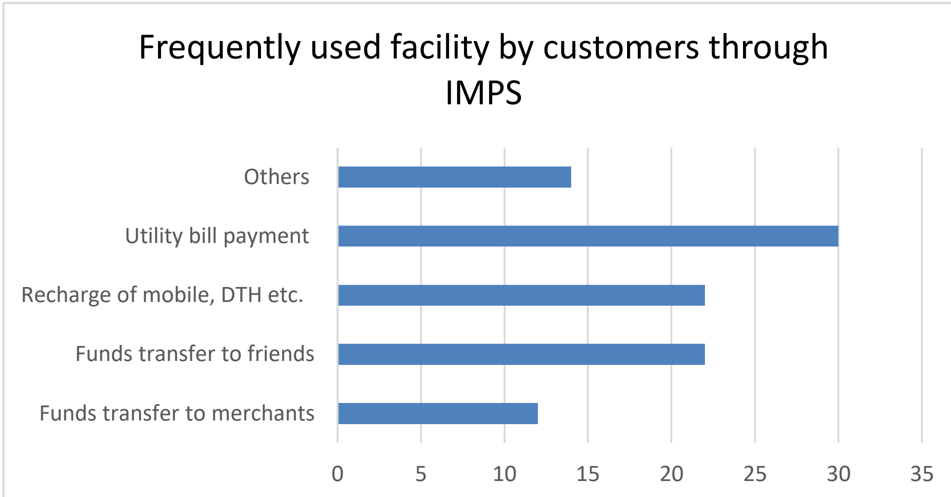

Table-6

Facility	No. of Respondents (%)
Funds transfer to merchants	12
Funds transfer to friends	22
Recharge of mobile, DTH etc.	22
Utility bill payment	30
Others	14
Total	100

(Source: Primary Data)

Interpretation

The study shows that 30 % customers are using IMPS service for utility bill payment. The service is also being used by 22% customers for transferring funds to friends and for recharge of mobile and DTH. 12% bank customers are using it for transferring funds to merchants. It is also used for some other purposes by 14% customers.

7. Problem faced by customers while using IMPS:

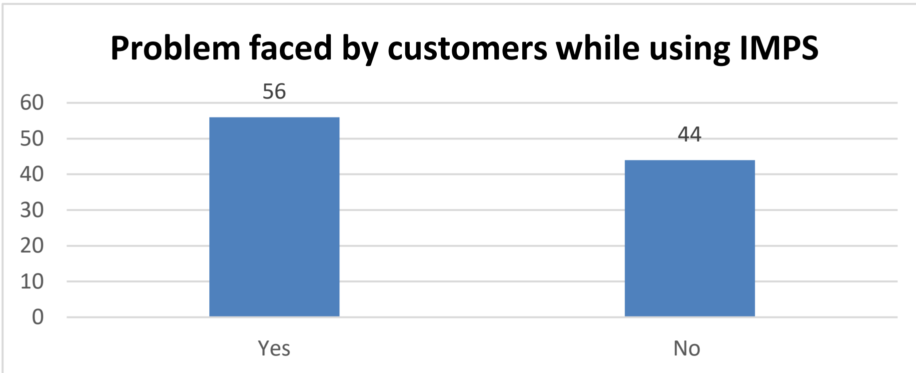

Table-7

Response	No. of Respondents (%)
Yes	56
No	44
Total	100

(Source: Primary Data)

Interpretation

It is clear form table no.-7 that 56 % customers faced problem while using IMPS service offered by the bank. Therefore, majority of the customers have faced problem in using the service.

8. IMPS helps in saving customers' time:

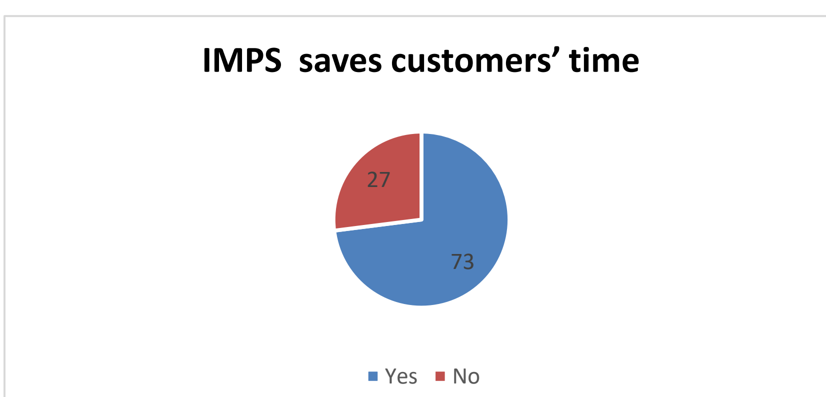

Table-8

Response	No. of Respondents (%)
Yes	73
No	27
Total	100

(Source: Primary Data)

Interpretation

The study reveals that IMPS helps in saving customers' time. Majority of the customers (73%) said that IMPS saved their time.

9. IMPS is a complicated service:

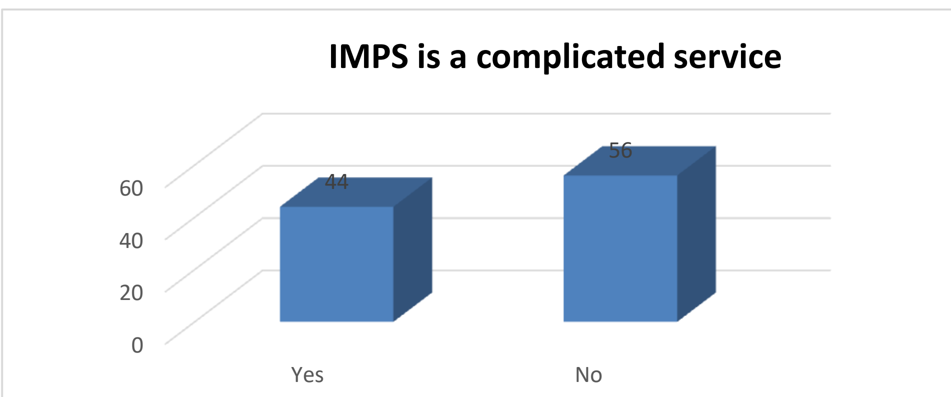

Table-9

Response	No. of Respondents (%)
Yes	44
No	56
Total	100

(Source: Primary Data)

Interpretation

The study reflects that IMPS is not a complicated service. It is clear from table-9 that 56% bank customers said that IMPS is not a complicated service. Only 44% customers believe that it is a complicated service.

10. Will you recommend IMPS to others

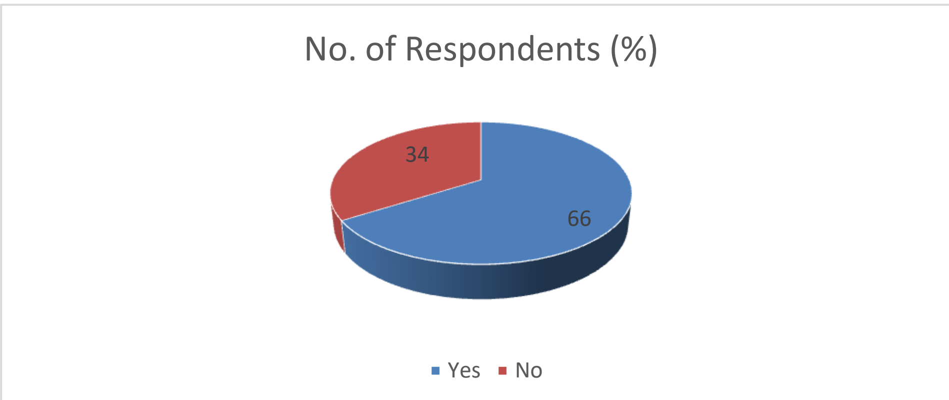

Table-10

Response	**No. of Respondents (%)**
Yes	66
No	34
Total	100

(Source: Primary Data)

Interpretation

The research shows that 66% customers are ready to recommend IMPS service to others. Majority of the customers will recommend it to others. (Table no.-10)

11. How will you rate IMPS service offered by the bank:

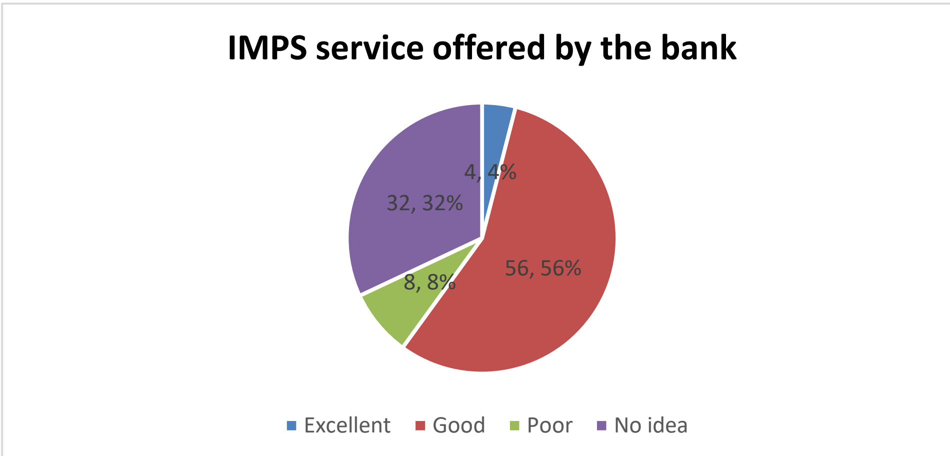

Table-11

Response	No. of Respondents (%)
Excellent	4
Good	56
Poor	8
No idea	32
Total	100

(Source: Primary Data)

Interpretation

The study found that 4% customers believe that IMPS is an excellent service. According to 56% bank customers it is a good service. Only 8% customers found it a poor service. 32% customers had no idea regarding the service.

10. Major findings:

a. Most customers (67%) use IMPS service.

b. IMPS is more popular among men, with 64% of male customers using it.

c. 48% of bank customers use IMPS regularly.

d. 72% of bank customers find IMPS service from ICICI Bank convenient and simple.

e. 76% of customers think there is a risk involved with IMPS.

f. 30% of customers use IMPS to pay utility bills.

g. 56% of customers had problems using IMPS provided by the bank.

h. Most customers (73%) said IMPS saves their time.

i. 56% of bank customers believe IMPS is not a complicated service.

j. 66% of customers are willing to recommend IMPS to others.

k. 56% of bank customers think IMPS service is 'good'.

11. Suggestions

i. Bank officials should help customers learn about IMPS.

ii. The bank can show how to use IMPS through different media, like videos or tutorials.

iii. The bank should make IMPS service easier to use.

iv. The bank should ensure that accessing and using IMPS is simple.

v. IMPS could also be linked with ATMs and NEFT services.

12. Conclusion:

IMPS is becoming popular with customers. However, some customers are not using it for various reasons. Some avoid it because they believe it involves a high risk. IMPS can be used through Internet banking, mobile apps, or ATMs, and for this, customers need to be comfortable with technology. Most IMPS users are from the educated class. Each bank has its own IMPS setup. To use IMPS, you need an MMID, which can be a challenge for customers. Bank staff should be more helpful and encourage customers to use IMPS.

References:

- Vaidya (2011): "Emerging Trends on Functional Utilization of Mobile Banking in Developed Markets in Next 3-4 Years"
- Tiwari, Rajnish and Buse, Stephan(2007): The Mobile Commerce Prospects: A Strategic Analysis of Opportunities in the Banking Sector, Hamburg University Press (E-Book as PDF to be downloaded)
- Tiwari, Rajnish; Buse, Stephan and Herstatt, Cornelius (2007): Mobile Services in Banking Sector: The Role of Innovative Business Solutions in Generating Competitive Advantage, in: Proceedings of the International Research Conference on Quality, Innovation and Knowledge Management, New Delhi, pp. 886–894.
- Tiwari, Rajnish; Buse, Stephan and Herstatt, Cornelius (2006): Customer on the Move: Strategic Implications of Mobile Banking for Banks and Financial Enterprises, in: CEC/EEE 2006, Proceedings of The 8th IEEE International Conference on E-Commerce Technology and The 3rd IEEE International Conference on Enterprise Computing, E-Commerce, and E-Services (CEC/EEE'06), San Francisco, pp. 522–529.
- Tiwari, Rajnish; Buse, Stephan and Herstatt, Cornelius (2006): Mobile Banking as Business Strategy: Impact of Mobile Technologies on Customer Behaviour and its Implications for Banks, in: Technology Management for the Global Future - Proceedings of PICMET '06.
- http://www.mpf.org.in/pdf/Mobile%20Payment%20Systems%20and%20Services.pdf
- http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=1750

- http://theagni.com/2011/07/28/state-of-online-recharge-mobile-services-in-india/
- Times Of India. 4 September 2010.
- http://www.thehindubusinessline.com/industry-and-economy/government-andpolicy/article2397199.ece
- cga.nic.in/pdf/DougJohnson.pdf
- nrega.nic.in/circular/minutes%20ICT%20meeting%2017-11-2009.pdf
- WWW.GOOGLESCHOLAR.COM
- WWW.ONLINESBI.COM
- WWW.NETBANKINGSBI.COM
- WWW.PERSONALBANKING.COM
- WWW.NPCI.ORG.IN
- Cronin, Mary J. (1997). Banking and Finance on the Internet, John Wiley and Sons.ISBN 0-471-29219-2 page 41 from Banking and Finance on the Internet. Retrieved2008-07-10. "The Home Banking Dilemma". Retrieved 2008-07-10.
- "Computer Giants Giving a Major Boost to Increased Use of Corporate Videotex".Communications News. 1984. Retrieved 2008-07-10.

Unveiling the Resource Structure of NABARD: A Comprehensive Analysis

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Abstract

In the canvas of India's agricultural landscape and rural upliftment, the National Bank for Agriculture and Rural Development (NABARD) emerges as a cornerstone of transformation. With a mandate that transcends mere financial facilitation, NABARD plays a pivotal role in catalysing agricultural advancement, rural infrastructure development, and the empowerment of marginalized communities. As the financial bedrock, it nurtures the growth of agriculture through innovative funding models, sustains rural economies with targeted developmental projects, and fosters inclusivity by championing gender equity and social empowerment. This article undertakes a comprehensive analysis to unravel the intricate resource structure of NABARD. By examining its diverse funding mechanisms, allocation strategies, and the impact of its operations, this study delves into the dynamic interplay between financial resources and rural development outcomes. Through an exploration of secondary data, the study sheds light on NABARD's journey in mobilizing resources from share capital, reserves, and borrowings, to navigate the challenges of promoting agricultural growth and fostering sustainable livelihoods. This inquiry not only enriches the understanding of NABARD's financial underpinning but also contributes to the broader discourse on the synergy between financial institutions and rural development endeavours.

Keywords: *NABARD, financial capabilities, rural economy.*

Introduction

Established in 1982, the National Bank for Agriculture and Rural Development (NABARD) is a pioneering financial institution in India dedicated to fostering rural development, agricultural growth, and sustainable livelihoods. Founded as an apex development bank, NABARD emerged from the amalgamation of the Agricultural Credit Department and Rural Planning and Credit Cell of the Reserve Bank of India (RBI). It was envisioned to address the multifaceted challenges faced by the agricultural and rural sectors and to bridge the gap between financial institutions and rural communities.

NABARD's core objectives revolve around promoting rural prosperity by providing financial and developmental support to various stakeholders, including farmers, rural artisans, self-help groups, cooperatives, and rural infrastructure projects. It plays a pivotal role in achieving balanced and sustainable rural growth through:

Facilitating Credit Access: NABARD strives to ensure easy and equitable access to credit for rural individuals and institutions. It refines the credit structure by extending loans to financial institutions, cooperatives, and rural banks, enabling them to offer affordable credit options to farmers and other rural entrepreneurs.

Agricultural Development: Recognizing the central role of agriculture, NABARD supports projects and initiatives that enhance agricultural productivity, modernize farming practices, and promote sustainable agricultural techniques. It focuses on boosting farm income and ensuring food security.

Rural Infrastructure: NABARD plays a crucial role in developing rural infrastructure, including irrigation, water supply, and rural connectivity. By funding such projects, NABARD contributes to improved living conditions and enhanced economic opportunities in rural areas.

Inclusive Finance: The institution emphasizes inclusive finance by backing initiatives that empower marginalized sections of society, including women, tribal communities, and small-scale entrepreneurs. It supports the creation and strengthening of self-help groups and microfinance institutions.

Financial Intermediation: NABARD mobilizes resources from diverse sources, including the government, domestic and international financial institutions, and the capital market. It then channels these resources towards rural development projects that align with its objectives.

Capacity Building: NABARD offers technical assistance, training, and advisory services to financial institutions, cooperatives, and other stakeholders to enhance their efficiency, governance, and outreach.

Environmental Sustainability: The institution places a strong emphasis on environmentally sustainable practices. It supports projects that incorporate eco-friendly technologies, promote water conservation, and ensure soil health, fostering a harmonious relationship between agriculture and nature.

Social Empowerment: NABARD's initiatives contribute to social empowerment by uplifting rural communities, especially women and marginalized groups. Through skill development, entrepreneurship promotion, and social awareness campaigns, it enhances livelihood opportunities and quality of life.

In summary, NABARD stands as a cornerstone of India's rural development strategy, championing the cause of agricultural advancement, rural infrastructure development, and sustainable livelihoods. Its resource structure plays a pivotal role in enabling the institution to translate its mission into impactful actions on the ground, leading to holistic growth and prosperity in rural India.

Objective of the Study:

The primary objective of this study is to conduct a comprehensive analysis of the resource structure of NABARD, its funding mechanisms, allocation strategies, impact on rural development, and potential for future growth. This study aims to achieve the following:

- Examine Resource Mobilization Strategies

- Evaluate Allocation and Impact
- Assess Innovative Funding Approaches
- Identify Challenges and Future Prospects
- Contribute to Knowledge Enhancement

Methodology

The study employs a combined descriptive and analytical approach, drawing insights from secondary data sources. This study primarily relies on existing secondary information, including NABARD annual reports, library books, journals, newspapers, magazines, government publications, and websites. Additionally, the study employs analytical techniques to examine patterns, trends, and impact indicators within the data, facilitating a deeper understanding of NABARD's contributions. The study ensures ethical practices by appropriately citing and referencing all sources used in the research. It maintains the integrity of the information derived from secondary sources and adheres to academic standards.

Limitations of the study:

The study acknowledges the limitations arising from the absence of primary data collection. While first-hand field-level data could have provided a more accurate and comprehensive depiction of NABARD's developmental impact, constraints including time, financial resources, and personnel availability made it unfeasible for the researcher to engage in extensive fieldwork.

Sources of funds

A development bank engaged in lending activities, play a crucial role in facilitating its efficient operations and impact. The availability and institution's ability to balance, utilize and manage its resources significantly influence the institution's success and its ability to contribute effectively to agriculture and rural development. For the purpose of study total resources are classified in six groups viz., Share Capital, Reserve & Surplus, National Rural Credit Funds, Deposits (including RIDF), Borrowings, Bonds and Debentures, Current

Liabilities, Provisions and Others. NABARD's balance sheet size has become four times from ₹2.1 lakh crore to ₹8 lakh crore in the last 10 years depicting the expanding business horizon of NABARD.

Share Capital

Share capital refers to the funds subscribed by prospective owners, representing owned resources and encompassing subscriptions from shareholders. The share capital of the NABARD has seen notable fluctuations and increments over the years, reflecting the institution's efforts to bolster its financial foundation in alignment with its developmental goals. In accordance with Section 4 of the NABARD Act, the share capital of NABARD was initially set at Rs. 100 crores, allocated proportionally between the Central Government and the Reserve Bank of India (RBI). Later, the Central Government several times increased the authorised as well as subscribed share capital of the apex bank to adequately address its extensive requirements. Presently the authorised capital is ₹30,000 crore and the paid-up capital is ₹17,080 crore on 31 March 2023, with the Government of India holding 100% share.

The data (Table 1) suggests that there have been substantial increases in NABARD's share capital in recent years, reflecting the institution's efforts to enhance its financial resources. The years 2019 through 2022 appear to be particularly notable for significant capital infusion. Overall, these increments highlight NABARD's commitment to enhancing its financial capacity, enabling the institution to effectively carry out its mission of driving rural development, agricultural growth, and sustainable livelihoods in India. The consistent share capital in specific years underscores NABARD's focus on maintaining a robust financial base to support its developmental endeavours.

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Table 1 Position of Share Capital in Total Sources of Funds (₹ in crores)

Year	Share Capital (₹) as on 31st March	Total Fund (₹)	Share of Share Capital	
			As % of Total Fund	Rank in Total Fund
2018	5000	406641	1.23	VIII
2019	12580	487470	2.58	VII
2020	14080	532074	2.65	VII
2021	15080	657798	2.29	VII
2022	17080	757472	2.25	VI

Source NABARD Annual Report various issues

Reserve and Surplus

The provided data (Table 2) unveils a dynamic interplay of funds within the Reserve and Surplus of NABARD, showcasing the institution's strategic financial management. Comprising various earmarked funds such as the Reserve Fund, Research and Development Fund, Capital

Table 2 Position of Reserve & Surplus in Total Sources of Funds (₹ in crores)

Year	Reserve & Surplus			Reserve Fund (included in Reserve & Surplus)			Total Fund	Share of Reserve & Surplus	
	As on 31st March	Net Increase during the year	% increase (YoY)	As on 31st March	Net Increase during the year	% increase (YoY)		As % of Total Fund	Rank in Total Fund
2018	27731	2961	11.95	18356	2006	12.27	406641	6.82	IV
2019	31093	3362	12.12	20831	2475	13.48	487470	6.38	IV
2020	34950	3857	12.40	23661	2830	13.59	532074	6.57	IV
2021	39268	4318	12.35	26245	2584	10.92	657798	5.97	IV
2022	43939	4671	11.90	28620	2375	9.05	757472	5.80	IV

Source NABARD Annual Report various issues

Reserve, Investment Fluctuation Reserve, and more, NABARD's Reserve and Surplus reflect a multifaceted approach to resource allocation.

The years 2017-18 to 2021-22, characterized by robust annual increments ranging from 11.95% to 12.40%, highlight NABARD's emphasis on sustaining financial resources while expanding its reach and developmental impact. This metric underscores a balanced approach to resource allocation, with the share of Reserve and Surplus oscillating between 5.80% to 6.82%. This consistency reflects NABARD's adeptness at managing diverse fund categories while maintaining an equilibrium within its financial structure.

National Rural Credit Funds

Analysis of the data presented in Table 3 sheds light on the intricate dynamics of the National

Table 3 Position of National Rural Credit Funds in Total Sources of Funds
(₹ in crores)

Year	National Rural Credit Funds	National Rural Credit (LTO) Fund	National Rural Credit (Stabilization) Fund	Total Fund	Share of National Rural Credit Funds	
					As % of Total Fund	Rank in Total Fund
2018	16082	14491	1591	406641	3.95	V
2019	16086	14493	1593	487470	3.30	V
2020	16090	14495	1595	532074	3.02	V
2021	16094	14497	1597	657798	2.45	VI
2022	16098	14499	1599	757472	2.13	VII

Source NABARD Annual Report various issues

Rural Credit Funds, comprising the National Rural Credit (Long Term Operations) Fund and the National Rural Credit (Stabilization) Fund, within NABARD's financial architecture. These funds play a vital role in facilitating

NABARD's dual objectives of fostering long-term agricultural and rural development initiatives while maintaining financial stability in the face of economic fluctuations. However, from 2017-18 onwards, a gradual decline in their share within the Total Fund is observed, which may suggest a recalibration of priorities.

Deposits

The data provided in Table 4 offers a comprehensive view of the deposits within the National Bank for Agriculture and Rural Development (NABARD), including the Rural Infrastructure Development Fund (RIDF), which is pivotal in driving rural developmental projects. NABARD's deposits stem from a diverse range of sources, encompassing Central and State Governments, Tea/Rubber/Coffee Deposits, Term Deposits, Commercial Banks (Deposits under RIDF), Short Term Cooperative Rural Credit Fund, and ST RRB Credit Refinance Fund.

Table 4 Position of Deposits in Total Sources of Funds (₹ in crores)

Year	Deposits (including RIDF)			Rural Infrastructure Development Fund (RIDF)			Total Fund	Share of Deposits	
	As on 31st March	Net Increase during the year	% increase (YoY)	As on 31st March	Net Increase during the year	% increase (YoY)		As % of Total Fund	Rank in Total Fund
2018	214449	20035	10.31	116313	10811	10.25	406641	52.74	I
2019	224146	9697	4.52	119762	3449	2.97	487470	45.98	I
2020	236463	12317	5.50	130442	10680	8.92	532074	44.44	I
2021	241572	5109	2.16	136226	5784	4.43	657798	36.72	I
2022	252126	10554	4.37	147226	11000	8.07	757472	33.29	I

Source NABARD Annual Report various issues

This intricate blend of deposit sources underscores NABARD's strategic approach to resource mobilization, catering to a wide spectrum of rural development needs. Notably, the Rural Infrastructure Development Fund (RIDF) emerges as a substantial component of NABARD's deposits, signalling its commitment to promoting infrastructure growth in rural areas. Within the context of the Total Fund, the share of deposits, including RIDF, consistently stands as the highest proportion, underscoring their integral role in NABARD's financial structure.

Borrowings, Bonds and Debentures

The Bonds and Debentures component has shown notable variations (Table 5) over the years. From 2018 to 2022, NABARD's bonds and debentures consistently grew as a significant portion of its total sources of funds. The net increase in bonds and debentures was particularly notable in 2018, 2019, and 2021, with YoY growth rates of 46.47%, 42.94%, and 40.16%, respectively. Despite a slightly lower increase in 2022 (17.72%), bonds and debentures maintained their position as the second-largest component of NABARD's total funds, accounting for around 18.20% to 30.44% of the total fund each year. Borrowings, while showing varied growth rates—including a notable decrease in 2020—remained the third-largest source of funds, contributing 10.96% to 21.61% of the total over the five years. This data highlights the critical role of bonds, debentures, and borrowings in NABARD's financial structure, with bonds and debentures consistently occupying a significant portion of the total funds, while borrowings fluctuated but still contributed substantially.. The fluctuations and growth trends observed indicate NABARD's flexibility in adapting to market conditions and its acumen in capitalizing on opportunities to raise funds for rural and agricultural development.

Table 5 Position of Borrowings, Bonds and Debentures in Total Sources of Funds

Year	Bonds and Debentures			Share of Bonds and Debentures		Borrowings			Total Fund	Share of Borrowings	
	As on 31st March	Net Increase during the year	% increase (YoY)	As % of Total Fund	Rank in Total Fund	As on 31st March	Net Increase during the year	% increase (YoY)		As % of Total Fund	Rank in Total Fund
2018	74021	23484	46.47	18.20	II	44552	9625	27.56	406641	10.96	III
2019	105802	31781	42.94	21.70	II	77925	33373	74.91	487470	15.99	III
2020	139752	33950	32.09	26.27	II	66671	-11254	-14.44	532074	12.53	III
2021	195882	56130	40.16	29.78	II	121657	54986	82.47	657798	18.49	III
2022	230592	34710	17.72	30.44	II	163657	42000	34.52	757472	21.61	III

Source NABARD Annual Report various issues

Current Liabilities, Provisions and Others

The data presented offers a glimpse into NABARD's intricate financial landscape, focusing on the dynamic interplay between its Current Liabilities & Provisions and the broader category labelled as "Others." This data illuminates NABARD's nuanced financial management strategies, showcasing how it navigates short-term obligations while maintaining a diverse portfolio of resources to drive its overarching developmental objectives.

The fluctuations observed in the Current Liabilities & Provisions component, coupled with their variations over the years, indicate NABARD's adaptive approach to managing its immediate financial commitments. This suggests a keen awareness of short-term obligations and an ability to recalibrate resources to address these evolving financial demands.

Simultaneously, the "Others" category, which encompasses various elements contributing to NABARD's financial pool, showcases fluctuations as well, with a noteworthy increase observed in 2018. This category's consistent presence within NABARD's Total Fund highlights its ongoing importance as a driver of the institution's financial structure and developmental initiatives. Overall, the variations and shifts in these components underscore NABARD's financial dexterity. The institution appears equipped to respond to dynamic financial environments, striking a balance between immediate obligations and its broader financial objectives.

Table 6 Position of Current Liabilities, Provisions and Others in Total Sources of Funds (₹ in crore)

Year	Current Liabilities & Provisions			Share of Current Liabilities & Provisions		Others			Total Fund	Share of Others	
	As on 31st March	Net Increase during the year	% increase (YoY)	As % of Total Fund	Rank in Total Fund	As on 31st March	Net Increase during the year	% increase (YoY)		As % of Total Fund	Rank in Total Fund
2018	12345	-2301	-15.71	3.04	II	12461	4573	57.97	406641	3.06	VI
2019	12888	543	4.40	2.64	II	6950	-5511	-44.23	487470	1.43	VIII
2020	15599	2711	21.04	2.93	II	8469	1519	21.86	532074	1.59	VIII
2021	18386	2787	17.87	2.80	II	9859	1390	16.41	657798	1.50	VIII
2022	21487	3101	16.87	2.84	II	12493	2634	26.72	757472	1.65	VIII

Source NABARD Annual Report various issues

Conclusion

In light of the comprehensive analysis of NABARD's financial structure based on the provided data, several key insights emerge. NABARD stands as a pivotal force in India's agricultural and rural development, harnessing a diverse range of financial resources to fulfil its mission. The institution's adept financial management is evident in its strategic choice of resources as sources across various funds and avenues, showcasing a commitment to holistic growth.

From examining resource sources such as Share Capital, Deposits, Bonds and Debentures, to scrutinizing funds like the National Rural Credit Funds and Reserve and Surplus, it's evident that NABARD employs a multi-faceted approach to resource mobilization. These funds, tailored to support specific initiatives such as rural infrastructure development and credit enhancement, emphasize NABARD's focus on targeted impact.

Additionally, the institution's strategic engagement with Borrowings and its management of Current Liabilities & Provisions reflect adaptability to changing financial landscapes while safeguarding its commitments. NABARD's emphasis on striking a balance between short-term obligations and long-term growth underscores its financial prudence.

In conclusion, the data analysis demonstrates NABARD's prowess in effectively managing its financial resources. The institution's commitment to inclusive growth, rural prosperity, and sustainable development is mirrored in its astute financial decision-making. NABARD's role in transforming India's rural landscape remains integral, driven by its meticulous financial strategies and unwavering dedication to fostering positive change.

References

1. NABARD Annual Reports various issues.
2. R.P. Singh: NABARD Organisation, Management and Role", Deep and Deep Publication, New Delhi, 1993.
3. K. Prabhakar Rajkumar: Agricultural Finance in India, The Role of NABARD", New Century Publications, New Delhi, 2008.
4. Dr. R. S. Bharatisha Rao, Dr. Sreekanth. M.S. and Dr. Savitha Trivedi (2010), The Role of NABARD in Promoting Self Help Groups (SHGs’), Adarsh Journal of Management Research, Vol 3 Issue 2.

5. Kundu Nikita, Raj Manish (2021), A critical analysis on the role of microfinance on the Indian economy (2010-2020), International Journal of Creative Research Thoughts, Volume 9, issue 5.
6. Dr. Agrawal Vineeta (2019), NABARD SHG Bank-Linkage Model: Progress, Challenges & Recommendations, International Journal for Research in Engineering Application & Management (IJREAM), Vol-05, Issue-03.
7. APMAS, "Quality and Sustainability of SHGs in Assam", Sponsored by NABARD and APMAS, Hyderabad, September, 2009. [Online]. Available: http://www.apmas.org.
8. Suja S (2012) Woman Empowerment Through Self-Help Group-An Evaluative Study. Global Management Review, 6: 68-83
9. NABARD report. (2018). Status of Microfinance in India - 2017-18 Mumbai: National Bank for Agriculture & Rural Development.

Management Efficiency and Board Gender Diversity with ESG Performance as a Moderator: A Literature Review

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Abstract

This paper presents a comprehensive literature review exploring the impact of board gender diversity on managerial efficiency, with a particular focus on Environmental, Social, and Governance (ESG) disclosure as a moderating factor. As businesses increasingly prioritize sustainability and inclusive governance, understanding how these elements influence managerial outcomes becomes critical. The review synthesizes existing research on board gender diversity, highlighting its role in enhancing decision-making, corporate governance, and strategic oversight, which are key determinants of managerial efficiency. Additionally, the paper examines ESG disclosure's potential to amplify or moderate these effects by promoting transparency, reducing risks, and aligning corporate strategies with stakeholder expectations. The analysis identifies gaps in the current literature and suggests avenues for future research, particularly in understanding the dynamic interplay between board composition and sustainability practices. By integrating findings from various studies, this paper contributes to the ongoing discourse on how diversity and ESG considerations shape the effectiveness of corporate management, offering insights for both academics and practitioners seeking to optimize governance frameworks in a rapidly evolving business environment.

Introduction

Women's equality and liberation have substantially shifted attitudes and perceptions worldwide. It may seem that women have achieved true equality, given the increasing number of women in boardrooms, greater legislative rights, and the growing visibility of women as impressive role models in various aspects of life. It is unfortunate that despite significant advancements, women still face numerous obstacles as they strive to establish themselves as leaders in various professional domains like inequality in pay compared to their male counterparts, remaining underrepresented in business and politics, and women's education, health, and experiences of violence are worse on a global scale (International Women’s Day (March 8) Gender Equality Today for a Sustainable Tomorrow (Ministry of Women and Child Development), 2022). According to the UNDP Strategic Plan 2022-25, which aligns with the UN Sustainable Development Goals Agenda 2030, it is essential to address the structural barriers to gender equality and enhance women's economic empowerment and leadership as a critical factor for building a sustainable future (*UNITED NATIONS DEVELOPMENT PROGRAMME*, n.d.). The latest Women in the Workplace Report from McKinsey also emphasises the importance of companies making significant strides towards achieving gender equality rather than just meeting minimum requirements(*Women in the Workplace 2022*, n.d.) A recent survey by the 2023 Grant Thornton Women in Business Report reveals that the percentage of women holding senior management positions in midmarket businesses in India has only increased by half a percentage point since 2022. Globally, the survey shows that women hold 32.4% of senior management positions in midmarket businesses in India, a slight increase of 0.5pp from the previous year's 31.9%. According to the World Economic Forum's (WEF) Global Gender Gap report, only 34% of senior leadership roles will be occupied by women by 2025. It will take approximately 132 years to bridge the global gender gap. Furthermore, 9% of mid-market businesses worldwide still do not have women in senior leadership positions (*Women in Business 2023*, n.d.).

The literature on board composition is quite diverse, with board demographic diversity being one of its vital phenomena(Rao & Tilt, 2016). Diversity of the board (DIB) encompasses some visible criteria like gender, age, nationality or tenure; and certain intangible aspects like qualification and occupational and operational history of the board members (Kang et al., 2007). These demographic characteristics tend to influence the board's functioning in one way or another (Post & Byron, 2015). The most widely researched variable among the observable attributes of board diversity is 'gender diversity' (Hillman, 2015). Gender diversity is a complex and contentious topic that elicits strong responses and often polarises societal views (Wren et al., 2019). This dimension of board diversity encapsulates three comprehensive perspectives: theoretical, ethical and moral, and business case(Salancik & Pfeffer, 1978). A diverse board is believed to have many ideas and opinions, free from manipulations of any kind, effective in administrative tasks, and members devoted to achieving companies' interests, not theirs Click or tap here to enter text.(Imuetinyan & Dibie, 2021). A growing corpus of studies has investigated the effects of women being appointed to the top of the corporate hierarchy, highlighting many resources women bring to the board (Abdullah et al., 2016; Martín-Ugedo & Minguez-Vera, 2014). Despite the numerous advantages diverse boards offer, certain conflicting opinions on board diversity also exist, whereby boards fail to handle diversity efficiently, presenting tension, distrust, misunderstandings, communication gaps, lack of cohesion and conflicts (Gasper, et al., 2010).

BGD has become increasingly important as the world focuses on sustainability, and its importance cannot be overlooked(Cabeza-García et al., 2018a; Galbreath, 2018). Additionally, being a crucial aspect of corporate governance practices, the field of management literature includes numerous studies on the subject, mainly related to firms' approaches to issues related to society, the economy and the environment (Kouki, 2021; Nguyen et al., 2020; Oh et al., 2019). Firms have been urged by legal requirements and social pressures to prioritise gender diversity in their top management team and board (Fernando et al., 2020; Thams et al., 2018). Additionally, policymakers have initiated action acknowledging the importance of tackling gender inequality in the workplace, resulting in the implementation of gender quotas on corporate boards becoming a popular approach. In fact, in emerging markets with lower corporate transparency, weaker institutions, and less progressive attitudes towards gender equality, symbolic actions in board appointments are particularly significant. In 2003, Norway implemented a mandatory requirement for corporate boards to have a minimum of 40% women representation as a solution to address the emerging issue, which sparked a movement for other countries to follow suit. Those who have implemented their quotas are Spain, Finland, Iceland, France, Israel, Kenya, Italy, Belgium, Portugal, Germany, and Austria. In March 2020, the European Commission declared its aim to achieve a gender balance of 50% in its management structure by the close of 2024. India had an operational stock market for 138 years but no corporate governance legislation until the late 1990s (Faisal, n.d.). In 2000, SEBI included Clause 49, which was only applicable to listed companies, as a significant move in this direction (Faisal, n.d.). With the enactment of the Companies Act 2013 and its notification in the official gazette in March 2014, CG has been given top priority as the act mandated the companies to have at least one female director, demonstrating a commitment to gender quotas(Aguilera et al., 2021; Faisal, n.d.). An analysis was conducted on the compliance decisions of NIFTY 500 companies listed on India's National Stock Exchange (NSE) based on their market capitalisation in 2013. The study revealed that 303 firms, accounting for 60.6%, had no female directors on their board in 2013 and were mandated to appoint at least one by April 1, 2015. Subsequently, by 2017, 82.8% of the previously non-compliant companies tried to appoint at least one woman to their board, while 13.6% went further and appointed two or more female directors (Aguilera et al., 2021). A report by EY indicates that India has made significant strides in enhancing women's representation on boards. From a meagre 6% in 2013, the figure has grown to 18% in 2022 (*Diversity in the Boardroom*, n.d.). Additionally, almost all NIFTY 500 companies, a whopping 95%, have at least one woman on their Board of Directors (*Diversity in the Boardroom*, n.d.). Research conducted by the ILO indicates that if the percentage of women in the workforce in India is doubled, it will result in a rise in the country's GDP to US$700 billion by 2025. This increase in the workforce would also boost the growth rate from 7.5% to 9%. Therefore, this area has room for improvement (*Diversity in the Boardroom*, n.d.).

Literature Review with Theoretical Foundations

The literature on organizational legitimacy posits that large firms are most visible to the general public, which brings them under more pressure to conform to the societal expectations (Hillman et al., 2007; Adams and Ferreira, 2009). Gender diversity is also a part of societal expectations that have been expressed globally from a variety of business stakeholders. For instance, communities such as Women's Forum and Global Summit of Women insert pressure on large firms to increase female representation in their upper echelons. From the agency perspective, the recent widely publicized corporate scandals such as Enron and WorldCom in the US, as well as the failure of financial institutions such as Lehman Brothers, have renewed the debates on corporate governance across the globe.

Empirical studies confirm this prediction in developed countries by showing a positive relationship between firm size and board gender diversity (e.g., Hillman et al., 2007; Hyland and Marcellino, 2002).

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The agency theory (Jensen and Meckling, 1976) suggests a monitoring of directors, referring to the governance function, in which directors can serve shareholders by monitoring and controlling managers. A common argument in the agency theory is that corporate board diversity which increases board independence is critical for boards to monitor managers' activities. In this vein, a gender-diversified board is considered as a better monitor of management since it is less likely to subvert the interests of shareholders. Substantial evidence exists to empirically support this notion. For instance, Carter et al. (2003) draw on the agency theory to investigate the impact of gender composition of corporate boards on value of Fortune 1000 firms, finding a significant positive effect of the presence of women directors on firm value. Further, Adams and Ferreira (2009) report that more gender balanced boards demand more audit efforts and managerial accountability. However, some studies also argue that too much monitoring can decrease shareholder value (e.g. Almazan and Suarez, 2003). Lastly, the presence of women also leads to an increase in corporate performance (Galbreath, 2011; Erhardt et al., 2003), although this claim is not unanimously supported in empirical studies which show no or negative relation between women directors and firm performance (e.g. Adams and Ferreira, 2009; Rose, 2007).

Various behavioural theories have explained how having gender diversity on boards can enhance performance (Yasmin & Akhter, 2019). Agency theory is a commendable theory in this regard. According to agency theory, having a balanced board can prevent one person from dominating the decision-making process, ultimately leading to potential improvements in corporate performance (Hampel, 1998). Resource dependence theory provides a theoretical perspective on the role of the board of directors, regardless of gender, which is critical for a firm's success (Yasmin & Akhter, 2019). The first study on agency theory was carried out in the early 19th century (Means, 2017), and numerous studies have been conducted since then. This theory is among the oldest in management and economics literature (Daily et al., 2003; Wasserman, 2006). In the case of joint stock companies, the theory aids in implementing governance mechanisms for controlling agents' actions (Panda & Leepsa, 2017). As per the theory, directors are responsible for monitoring and overseeing managers to govern and serve the interests of shareholders (Jensen & Meckling, 1976). Several authors have established various metrics for agency costs, and there are two schools of thought when measuring these costs. The first school of thought used the asset utilisation ratio and expenses ratio as the measures of agency cost and were employed by (Ang et al., 2000; Firth et al., 2006; Singh & Davidson III, 2003) in their respective studies. The second approach viewed firm performance as a reverse indicator of agency cost comprising Tobin' Q (Agrawal & Knoeber, 1996; Morck et al., 1988), return on assets (ROE) and return on equity (ROE) used by many researchers (Li & Cui, 2003; Xu et al., 2005). According to agency theorists, implementing effective governance mechanisms can aid in mitigating agency conflicts (Panda & Leepsa, 2017).Some studies have indicated that utilising big and influential boards as a means of governance can be beneficial. have opined the success of smaller boards for the firm's performance (Lipton & Lorsch, 1992). Many proponents of agency theory claim that board diversity is crucial for effectively monitoring managers' activities. Specifically, a diverse board in terms of gender is believed to be better equipped to ensure that shareholders' interests are not compromised. The rationale is that a gender-diverse board will likely be more independent and less prone to collusion with management. These hypotheses prove the relationship between BGD and ME. Empirical evidence also supports this idea. For instance, according to the study (Carter et al., 2003)based on agency theory, the presence of women directors on corporate boards significantly positively impacted the value of Fortune 1000 firms. Although it was found that boards with equal representation of genders require greater accountability from managers and increased auditing efforts (Adams & Ferreira, 2009), excessive monitoring can potentially decrease the value of shares (Almazan et al., 2003).

The relationship between ESG and ME follows support from the legitimacy theory, which assists the role of ESG in boosting firms' efficiency (Behl et al., 2022). The legitimacy theory comes from the idea that an organisation can thrive and expand by gaining social acceptance (Guthrie & Parker, 1989). Based on the theory, when firms disclose their ESG practices, it demonstrates their dedication to society. It can create a sustainable source of profits (Behl et al., 2022). Since more prominent companies tend to be more noticeable to the public eye, they face even higher levels of pressure to comply with the expectations of society (Adams & Ferreira, 2009b; Hillman et al., 2007a). As businesses navigate the unpredictable and ever-changing landscape, they strive to fulfil their social contract by voluntarily disclosing social and environmental information (Schiopoiu et al., 2013) related to community participation, human resources, environmental efforts, and contributions in terms of products and services (Brammer & Pavelin, 2008). Legitimacy theory sheds light on why organisations behave this way, as it is crucial for their survival and recognition of their objectives (Schiopoiu et al., 2013). Several scholars argue that investing in certain areas may lead to short-term financial gains for companies but rather result in long-term benefits (Groening & Kanuri, 2013; López et al., 2007). Over time, this practice has created value and satisfied investors, prompting further research into the role of ESG in Asia (Alsayegh et al., 2020). Gender diversity has become a global societal expectation, with many business stakeholders pushing for it. In India, with its limited resources, large population, high population density, insufficient infrastructure, and political instability, there is a need for assistance in integrating ESG factors into strategic operations (Behl et al., 2022). Research in this field within India is necessary to address these challenges.

Board Gender Diversity and Managerial Efficiency

Improved communication of accurate and trustworthy information from boards to shareholders could encourage managers to act in ways that benefit shareholders. To measure the extent of board information, specific metrics have been used in previous studies like the count of board subcommittees, the presence of board members with managerial and industry experience, board members who have served for a long time, the frequency of board meetings, and the representation of specific ownership groups among board members. Numerous studies have explored the influence of governance factors on agency costs. For instance, a survey of 54 Agro-companies in Indonesia between 2010 and 2013 disclosed that a larger board size decreases agency costs. Similar findings were reported in a study on 79 New Zealand-listed firms (Fauzi & Locke, 2012). Studies have discovered that smaller board size helps curtail agency costs (Gul et al., 2012; Singh & Davidson III, 2003). Research conducted by (Gul et al., 2012; Miller, 2011; Rashid, 2015) has shown that having independent board members can positively impact agency costs because more independent directors from outside the company are believed to monitor managers better and help align the interests of owners and managers, which, in turn, can lead to increased efficiency for the firm (Rosenstein & Wyatt, 1990). A study conducted on 1126 listed companies in China from 2002 to 2004 found that having an audit committee enhanced managers' efficiency and lowered agency costs (Cai et al., n.d.). Several studies have found evidence suggesting a positive relationship between compensation, nomination committees, and reduced agency costs (Fauzi & Locke, 2012; McKnight & Weir, 2009; Sanjaya & Christianti, n.d.). There is limited research regarding the impact of board gender diversity on managerial efficiency as it relates to the governance mechanisms of companies. This topic would be particularly intriguing to explore further. Previous research has utilised the agency theory framework to analyse how board gender diversity affects a firm's decisions (Ararat et al., 2015; Carter et al., 2003; Francoeur et al., 2008). Many studies have focused on the correlation between board gender diversity and a company's financial performance, primarily using standard measures like return on assets (ROA) and equity (ROE). However, little research has been done on other measures of financial performance, such as asset utilisation efficiency and risk-taking behaviour. Despite this, different researchers have provided subjective explanations for the positive relationship between having more women on the board and a company's success, utilising a variety of perspectives. The efficiency of a firm is measured in this study by using agency cost as the dependent variable. Efficiency is the success of producing as much output as possible from the available inputs (Farrell, 1957; Mozaffari et al., 2014). The managers can deliver products or services cost-effectively to their customers (Kuosmanen & Johnson, 2017).This approach aligns with the conclusions of some previous studies (Ang et al., 2000; Rashid, 2013; Singh & Davidson III, 2003).To measure company efficiency, two metrics of agency cost - asset utilisation ratio (AUR) and expense ratio (ER) - are being utilised (Rashid, 2013).

Board Gender Diversity and Asset Turnover Ratio of Firms

The asset utilisation or turnover ratio measures agency cost (Ang et al., 2000; Singh & Davidson III, 2003). The ratio determines how efficiently management uses a company's assets to generate sales. A high ratio indicates that assets generate substantial sales, which implies low agency costs. In contrast, a low ratio suggests that management is making poor investment decisions or consuming excessive perquisites, resulting in inefficient asset utilisation and high agency costs (McKnight & Weir, 2009). There is probably a relationship between BGD and ME, measured by ATR. Some research has been performed on the relationship between BGD and ATR. For instance, a study was conducted on commercial banks listed on the Dhaka Stock Exchange, using data from 2013 to 2018. The study examined the impact of BGD on firm performance, specifically using profitability measures such as asset utilisation efficiency and financial leverage, analysed through DuPont's identity. The correlation and regression analysis results showed no significant association between BGD and firm profitability, which goes against the commonly held belief of BGD proponents (Yasmin & Akhter, 2019). Another study utilised agency and resource dependence theories to analyse how corporate governance mechanisms impacted the Egyptian Stock Exchange (EGX) performance from 2014 to 2016. The results revealed that BGD, managerial ownership, and frequent board meetings positively impacted the efficiency of Egyptian firms as measured by their asset utilisation ratio. However, institutional ownership and board size had adverse effects (Ramadan & Hassan, 2022). Having female directors on boards can significantly benefit companies by tapping into their unique skills, competencies, knowledge, and leadership styles that differ from those of male directors, which allows for better access to vital resources and overall success (Hillman et al., 2007b) They build strong relationships, and having a say in corporate decision-making can improve a company's overall performance (Seierstad et al., 2017). It was found that a positive correlation exists between the number of female board directors, in both fractional and absolute terms, and the firm's performance (Liu et al., 2014).

Contrary to the above findings, a panel model study examined the potential impact of female directors in top-level management on principal-principal conflict (PP) and principal-agent conflict (PA) in 75 companies listed on the Bombay Stock Exchange from 2006 to 2019. The results showed that the presence or proportion of female directors did not significantly affect the firm's agency cost (PP and PA). The independent variables were the proportion and presence of women directors on top-level management boards. At the same time, the assets utilisation ratio (AUR) measured principal-principal conflict, and the dividend payout ratio (DPR) measured principal-agent conflict (Yadav & Yadav, 2021). Some other studies also provide contradictory outcomes of BGD on corporate efficiency (Babalos et al., 2015; Francoeur et al., 2008; Ramly et al., n.d.; Sutiono & Sutiono, 2020).

Board Gender Diversity and Expense Ratio of Firms

Companies have begun acknowledging the economic importance of having women on their boards, increasing female representation (Saeed et al., 2019). An economic measure that assesses the effectiveness of managers in regulating operating expenses is the expense ratio, and a lower expense ratio is preferable (Panda & Leepsa, 2017). Previously, the researchers have documented specific mechanisms like managerial equity ownership, CEO ownership, independent board members, and board size to monitor the expense ratio of firms (Ang et al., 2000; Davidson Iii et al., 2006; Jelinek & Stuerke, 2009; McKnight & Weir, 2009; Rashid, 2013; Wellalage & Locke, 2011). However, studies portraying the effect of board gender diversity on the expense ratio of firms are very scarce. In assessing efficiency, most studies have used ratios to measure the operating efficiency of decision-making units (Banker et al., 1984; Berger & Humphrey, 1997). Additionally, firms utilise the DEA technique to calculate efficiency scores, a managerial and performance measurement tool incorporating multiple predictors and criterion variables (Andres & Vallelado, 2008; Banker et al., 1984; Charnes et al., 1978; Humphrey & Pulley, 1997). The DEA model analyses the pre-elected inputs and outputs to evaluate an organisation's efficiency, helping managers make informed decisions and improve performance (Dyson & Shale, 2010). Additionally, since the credit and payments systems and economic development depend on the financial stability of financial institutions, most studies related to efficiency performance, particularly in terms of expenses, are only conducted in this area (Andres & Vallelado, 2008). When studying the effect of CEO ownership on agency costs in pre-IPO firms and after they became publicly traded companies, Board Composition did not seem to reduce agency costs as measured by Asset Utilization and Expenses Ratios (Davidson Iii et al., 2006). Studies have shown that companies with female board members tend to have higher levels of innovation and creativity, as measured by their expenses and citations, and this correlation is robust in industries where innovation is crucial (Chen et al., 2018). Board diversity is essential for enhancing a firm’s efficiency by curbing expenses (Ali et al., n.d.; Andres & Vallelado, 2008). Other studies have also documented a positive correlation between having more females on boards and increased efficiency, as reflected in the expense ratio (Francis et al., 2009; García-Sánchez et al., 2017). In a study conducted between 2005 and 2012, the effect of BGD on the performance of 128 commercial banks in Central and Eastern European nations discovered that increasing the representation of women on domestic or less independent supervisory boards had a positive and significant impact on expense ratios (Andres & Vallelado, 2008).

However, several studies offer contradictory findings (Erhardt et al., 2003; Marimuthu & Kolandaisamy, 2009). According to a study done on Malaysian banks between 2000 and 2009, the companies' cost and profit efficiency was unaffected by the presence of women in the boardroom (Chan & Heang, n.d.). Similarly, a study of the ASEAN-5 listed commercial banks found that gender diversity on boards was significantly associated with lower business efficiency, as seen by a higher expenditure ratio (Ramly et al., n.d.).

The Moderating effect of Environment, Social and Governance (ESG) Disclosure

ESG Disclosure encompasses many sustainability-related elements often not included in conventional investment reporting and analysis. It aids businesses in establishing a positive investor reputation after going public (Reber et al., 2022). In recent years, more businesses have begun to publish sustainability reports as they become more conscious of their moral obligations to society and the environment and adopt the goal of promoting sustainable development (Gray, 2010; Hossain et al., 2019). According to legitimacy theory, investors value businesses that take activities and conduct themselves in a way that is seen by society as a whole as "proper" and "appropriate" and then publicly disclose these actions (Reber et al., 2022). The theory suggests that legitimacy is jeopardised whenever corporate action deviates from accepted social norms (Suchman, 1995). Investing in sustainability is critical to a company's long-term performance, and sustainability management entails accepting economic and ESG variables and analysing their impact (Sutiono & Sutiono, 2020).

Scholars have closely examined the relationship between ESG disclosure and firms' efficiency, with most research indicating a favourable correlation (McWilliams & Siegel, 2011; Platonova et al., 2018). ESG is a tool for engaging and building connections with stakeholders by enhancing the firm's ethical, environmental, and social standards; collectively, these actions can eventually enhance corporate performance (Galbreath, 2016).

A BGD solely based on numbers might not be sufficient to improve a company's environmental performance; instead, to benefit from BGD, its internal and external aspects must be considered (Kochan et al., 2003). The board features such as gender diversity, size, and member independence influence company success through activities that members influence, such as ESG orientation (Hermalin & Weisbach, 2001). Many studies have portrayed that gender diversity on the board seems to be linked to the companies’ actions, which are tied to environmental, social, and corporate governance (Boulouta, 2013; Jain & Jamali, 2016). Research of the National Stock Exchange's (NSE) Nifty 100 companies found that while only a small number of women directors has minimal effect on ESG performance, these correlations improve when there are at least three women directors (P. et al., 2022). BGD influences a firm's ESG elements, which influences firm efficiency since enhanced BGD helps the board better address all stakeholders' interests, which is accomplished through sustainability management, eventually leading to improved firm performance (Sutiono & Sutiono, 2020). A panel data analysis of firms in the Financial Times Stock Exchange 350 index indicated that having women on boards positively impacts firm performance due to the benefits provided by ESG disclosures (Arayssi et al., 2016). According to the research of 133 Canadian organisations with data spanning 18 years from 2002 to 2019, the total effect of gender diversity on company efficiency performance (nine per cent of the total effect) was partly attributed to the company's ESG orientation (Ouni et al., 2020). According to (Galbreath, 2016), the participation of women on the BOD influences board members' awareness to concerns affecting stakeholders other than shareholders, and thus act on multiple fronts, namely economic, social, and environmental. A study conducted in Spain also disclosed the beneficial effects of board gender diversity, including the disclosure of ESG information(Cabeza-García et al., 2018b).

Conclusion and Discussion

Board gender diversity and ESG (Environmental, Social, and Governance) disclosure are increasingly recognized as key factors influencing the managerial efficiency of companies. Diverse boards, including gender diversity, tend to bring a wider range of perspectives and experiences, leading to better decision-making. This diversity can reduce the risks of groupthink and enhance creativity, ultimately improving the efficiency of management. Gender diversity on boards is often associated with stronger corporate governance practices. Women are sometimes found to be more diligent in oversight roles, potentially leading to more effective monitoring of management and better alignment with shareholder interests. Further, a gender-diverse board can improve a company's image and strengthen relationships with various stakeholders, including investors, customers, and employees. This can lead to better access to resources and more efficient operations.

Companies that engage in robust ESG disclosure are often better at identifying and managing risks related to environmental, social, and governance issues. This proactive approach can prevent costly incidents and improve long-term efficiency. Transparent ESG reporting can build investor confidence and attract investment from those who prioritize sustainability. This can lower the cost of capital and provide management with more resources to operate efficiently. ESG initiatives often lead to operational improvements, such as energy efficiency, waste reduction, and better labour practices. These improvements can directly enhance managerial efficiency by reducing costs and improving productivity.

Talking about the combined impact of the variables on managerial efficiency, companies that embrace both board gender diversity and comprehensive ESG disclosure tend to have a more forward-looking and strategically aligned management. This alignment can result in better long-term planning, resource allocation, and overall efficiency. A culture that values diversity and sustainability can foster a more engaged and motivated workforce, which is critical for operational efficiency. In summary, both board gender diversity and ESG disclosure contribute to creating a more efficient management structure by enhancing decision-making, improving risk management, attracting investment, and fostering a positive corporate culture.

References

1. Abdullah, S. N., Ismail, K. N. I. K., & Nachum, L. (2016). Does having women on boards create value? The impact of societal perceptions and corporate governance in emerging markets. Strategic Management Journal, 37(3), 466–476. https://doi.org/10.1002/smj.2352

2. Aguilera, R. V., Kuppuswamy, V., & Anand, R. (2021, February 5). What Happened When India Mandated Gender Diversity on Boards. Harvard Business Review.

3. Ararat, M., Aksu, M., & Tansel Cetin, A. (2015). How Board Diversity Affects Firm Performance in Emerging Markets: Evidence on Channels in Controlled Firms. Corporate Governance: An International Review, 23(2), 83–103. https://doi.org/10.1111/corg.12103

4. Arayssi, M., Dah, M., & Jizi, M. (2016). Women on boards, sustainability reporting and firm performance. Sustainability Accounting, Management and Policy Journal, 7(3), 376–401. https://doi.org/10.1108/SAMPJ-07-2015-0055

5. Babalos, V., Caporale, G. M., & Philippas, N. (2015). Gender, style diversity, and their effect on fund performance. Research in International Business and Finance, 35, 57–74. https://doi.org/10.1016/j.ribaf.2015.02.020

6. Boulouta, I. (2013). Hidden Connections: The Link Between Board Gender Diversity and Corporate Social Performance. Journal of Business Ethics, 113(2), 185–197. https://doi.org/10.1007/s10551-012-1293-7

7. Cabeza-García, L., Fernández-Gago, R., & Nieto, M. (2018a). Do Board Gender Diversity and Director Typology Impact CSR Reporting? European Management Review, 15(4), 559–575. https://doi.org/10.1111/emre.12143

8. Cai, C. X., Hillier, D., Tian, G., & Wu, Q. (n.d.). Do Audit Committees Reduce the Agency Costs of Ownership Structure?

9. Chen, J., Leung, W. S., & Evans, K. P. (2018). Female board representation, corporate innovation and firm performance. Journal of Empirical Finance, 48, 236–254. https://doi.org/10.1016/j.jempfin.2018.07.003

10. Daily, C. M., Dalton, D. R., & Rajagopalan, N. (2003). GOVERNANCE THROUGH OWNERSHIP: CENTURIES OF PRACTICE, DECADES OF RESEARCH. Academy of Management Journal, 46(2), 151–158. https://doi.org/10.2307/30040611

11. Dyson, R. G., & Shale, E. A. (2010). Data envelopment analysis, operational research and uncertainty. Journal of the Operational Research Society, 61(1), 25–34. https://doi.org/10.1057/jors.2009.145

12. Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of Director Diversity and Firm Financial Performance. Corporate Governance, 11(2), 102–111. https://doi.org/10.1111/1467-8683.00011

13. Fauzi, F., & Locke, S. (2012). Do Agency Costs Really Matter? A Non-linear Approach of Panel Data. Asian Journal of Finance & Accounting, 4(1). https://doi.org/10.5296/ajfa.v4i1.1783

14. Francis, B., Hasan, I., Park, J. C., & Wu, Q. (2009). Gender Differences in Financial Reporting Decision-Making: Evidence from Accounting Conservatism. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1471059

15. Francoeur, C., Labelle, R., & Sinclair-Desgagné, B. (2008). Gender diversity in corporate governance and top management. Journal of Business Ethics, 81(1), 83–95. https://doi.org/10.1007/s10551-007-9482-5

16. Galbreath, J. (2018). Is Board Gender Diversity Linked to Financial Performance? The Mediating Mechanism of CSR. Business & Society, 57(5), 863–889. https://doi.org/10.1177/0007650316647967

17. Groening, C., & Kanuri, V. K. (2013). Investor reaction to positive and negative corporate social events. Journal of Business Research, 66(10), 1852–1860. https://doi.org/10.1016/j.jbusres.2013.02.006

18. Hillman, A. J. (2015). Board Diversity: Beginning to Unpeel the Onion. Corporate Governance: An International Review, 23(2), 104–107. https://doi.org/10.1111/corg.12090

19. Hossain, M., Islam, Md. T., Momin, M. A., Nahar, S., & Alam, Md. S. (2019). Understanding Communication of Sustainability Reporting: Application of Symbolic Convergence Theory (SCT). Journal of Business Ethics, 160(2), 563–586. https://doi.org/10.1007/s10551-018-3874-6

20. Imuetinyan, D., & Dibie, R. A. (2021). Board Gender Diversity and Managerial Efficiency. Accounting & Taxation Review, 5(1). http://www.atreview.org

21. Jain, T., & Jamali, D. (2016). Looking Inside the Black Box: The Effect of Corporate Governance on Corporate Social Responsibility. Corporate Governance: An International Review, 24(3), 253–273. https://doi.org/10.1111/corg.12154

22. Kouki, A. (2021). Does gender diversity moderate the link between CEO dominance and CSR engagement? A two-step system GMM analysis of UK FTSE 100 companies. Journal of Sustainable Finance & Investment, 1–26. https://doi.org/10.1080/20430795.2021.1939644

23. Kuosmanen, T., & Johnson, A. (2017). Modeling joint production of multiple outputs in StoNED: Directional distance function approach. European Journal of Operational Research, 262(2), 792–801. https://doi.org/10.1016/j.ejor.2017.04.014

24. Liu, Y., Wei, Z., & Xie, F. (2014). Do women directors improve firm performance in China? Journal of Corporate Finance, 28, 169–184. https://doi.org/10.1016/j.jcorpfin.2013.11.016

25. Martín-Ugedo, J. F., & Minguez-Vera, A. (2014). Firm Performance and Women on the Board: Evidence from Spanish Small and Medium-Sized Enterprises. Feminist Economics, 20(3), 136–162. https://doi.org/10.1080/13545701.2014.895404

26. Means, G. (2017). The Modern Corporation and Private Property. Routledge. https://doi.org/10.4324/9781315133188

27. Miller, S. E. (2011). Governance Mechanisms As Moderators Of Agency Costs In A Pre-SOX Environment. Journal of Business & Economics Research (JBER), 7(10). https://doi.org/10.19030/jber.v7i10.2341

28. Mozaffari, M. R., Gerami, J., & Jablonsky, J. (2014). Relationship between DEA models without explicit inputs and DEA-R models. Central European Journal of Operations Research, 22(1), 1–12. https://doi.org/10.1007/s10100-012-0273-4

29. Nguyen, T. H. H., Ntim, C. G., & Malagila, J. K. (2020). Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. International Review of Financial Analysis, 71, 101554. https://doi.org/10.1016/j.irfa.2020.101554

30. Oh, W.-Y., Chang, Y. K., & Jung, R. (2019). Board characteristics and corporate social responsibility: Does family involvement in management matter? Journal of Business Research, 103, 23–33. https://doi.org/10.1016/j.jbusres.2019.05.028

31. Ouni, Z., Mansour, J. Ben, & Arfaoui, S. (2020). Board/executive gender diversity and firm financial performance in Canada: The mediating role of environmental, social, and governance (ESG) orientation. Sustainability (Switzerland), 12(20), 1–17. https://doi.org/10.3390/su12208386

32. Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. Indian Journal of Corporate Governance, 10(1), 74–95. https://doi.org/10.1177/0974686217701467

33. Platonova, E., Asutay, M., Dixon, R., & Mohammad, S. (2018). The Impact of Corporate Social Responsibility Disclosure on Financial Performance: Evidence from the GCC Islamic Banking Sector. Journal of Business Ethics, 151(2), 451–471. https://doi.org/10.1007/s10551-016-3229-0

34. Ramadan, M. M., & Hassan, M. K. (2022). Board gender diversity, governance and Egyptian listed firms' performance. Journal of Accounting in Emerging Economies, 12(2), 279–299. https://doi.org/10.1108/JAEE-02-2021-0057

35. Rao, K., & Tilt, C. (2016). Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. Journal of Business Ethics, 138(2), 327–347. https://doi.org/10.1007/s10551-015-2613-5

36. Rashid, A. (2015). Revisiting Agency Theory: Evidence of Board Independence and Agency Cost from Bangladesh. Journal of Business Ethics, 130(1), 181–198. https://doi.org/10.1007/s10551-014-2211-y

37. Reber, B., Gold, A., & Gold, S. (2022). ESG Disclosure and Idiosyncratic Risk in Initial Public Offerings. Journal of Business Ethics, 179(3), 867–886. https://doi.org/10.1007/s10551-021-04847-8

38. Saeed, A., Sameer, M., Raziq, M. M., Salman, A., & Hammoudeh, S. (2019). Board Gender Diversity and Organizational Determinants: Empirical Evidence from a Major Developing Country. Emerging Markets Finance and Trade, 55(8), 1803–1820. https://doi.org/10.1080/1540496X.2018.1496421

39. Schiopoiu Burlea, A., & Popa, I. (2013). Legitimacy Theory. In Encyclopedia of Corporate Social Responsibility (pp. 1579–1584). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_471

40. Seierstad, C., Warner-Søderholm, G., Torchia, M., & Huse, M. (2017). Increasing the Number of Women on Boards: The Role of Actors and Processes. Journal of Business Ethics, 141(2), 289–315. https://doi.org/10.1007/s10551-015-2715-0

41. Sutiono, N., & Sutiono, N. K. (2020). Board Gender Diversity, ESG, and Corporate Performance Board Gender Diversity, ESG, and Corporate Performance Board Gender Diversity, ESG and Corporate Performance. https://scholarworks.wmich.edu/honors_theses/3321

42. Thams, Y., Bendell, B. L., & Terjesen, S. (2018). Explaining women's presence on corporate boards: The institutionalization of progressive gender-related policies. Journal of Business Research, 86, 130–140. https://doi.org/10.1016/j.jbusres.2018.01.043

43. Wasserman, N. (2006). Stewards, agents, and the founder discount: Executive compensation in new ventures. Academy of Management Journal, 49(5), 960–976. https://doi.org/10.5465/AMJ.2006.22798177

44. Wren, B., Launer, J., Reiss, M. J., Swanepoel, A., & Music, G. (2019). Can evolutionary thinking shed light on gender diversity? BJPsych Advances, 25(6), 351–362. https://doi.org/10.1192/bja.2019.35

45. Xu, L. C., Zhu, T., & Lin, Y. M. (2005). Politician control, agency problems and ownership reform: Evidence from China. Economics of Transition, 13(1), 1–24. https://doi.org/10.1111/j.1468-0351.2005.00205.x

46. Yadav, P., & Prashar, A. (2022). Board gender diversity: implications for environment, social, and governance (ESG) performance of Indian firms. International Journal of Productivity and Performance Management. https://doi.org/10.1108/IJPPM-12-2021-0689

47. Yasmin, S., & Akhter, I. (2019). Does Gender Diversity in Corporate Boards Pay Off? A Study on the Banking Sector of Bangladesh (Vol. 40).

A STUDY ON CUSTOMER SATISFACTION TOWARDS E-COMMERCE WITH SPECIAL REFERENCE TO MADHYA PRADESH (REWA DISTRICT)

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ABSTRACT:

Online shoppers and e-commerce players have a plethora of opportunities owing to the rapid advancement of information technology (IT). In real terms, diverse use of the internet has become vital in today's world. One of the global industries that is expanding quickly is e-commerce. Stated differently, e-commerce is the traditional business's entry into the digital sphere. As a result of its ability to help businesses expand their operations internationally and increase internal efficiency while breaking down geographical barriers, it is thought to be the most promising use of information technology. The development of 5G and 4G networks has led to a rise in the usage of the internet and e-commerce websites, allowing for more flexible virtual buying and selling in terms of time and location. Customers may now purchase what they need online from sellers using compatible e-commerce browsers. However, as the internet has grown in popularity as a platform, customers' expectations have also grown, taking into account a variety of factors like speed, availability around-the-clock, variety, acceptance of online payments, ease of resolution, etc. The goal of this study is to investigate the relationship between electronic commerce and consumer satisfaction in general among Madhya Pradesh's Rewa District's customers.

KEYWORDS:

e-commerce, customer satisfaction, e-loyalty, online shopping.

INTRODUCTION:

The purchasing and selling of goods and services using the internet is referred to as electronic commerce, or e-commerce. It encompasses a range of operations that let companies and customers conduct business virtually, including digital payments, online retail, and online auctions.

Many factors make e-commerce extremely relevant, including its ease of use, accessibility from anywhere in the world, affordability, customisation, variety of payment methods, and ability to follow trends. Customers can shop around-the-clock from any location, which facilitates easier access to goods and services. Companies can broaden their business beyond local clients by connecting with a worldwide audience. Competitive pricing is made possible by the reduction of overhead costs that come with physical stores through e-commerce. Online retailers can provide tailored shopping experiences by using focused marketing campaigns and data analytics. Having a variety of payment options available to them improves the shopping experience. E-commerce is still necessary to be competitive as customer preferences continue to migrate towards digital alternatives.

Due to a number of factors including high Internet penetration, a variety of payment alternatives, improved logistics, the influence of COVID-19, and government initiatives, e-commerce has grown significantly in India in recent years. Online shopping has grown more accessible due to the fast increasing number of people using the internet, especially through mobile devices. The emergence of digital payment platforms such as mobile wallets and UPI has made transactions simpler. Online shoppers now have more confidence because to enhanced security measures and improved return procedures. A expanding middle class with more money to spend has raised demand for a range of goods. The epidemic hastened the trend towards internet shopping as customers looked for safer ways to make purchases. Infrastructure for e-commerce and policies that foster digital literacy have further aided in growth. Customers in rural places can now be more easily reached thanks to advancements in delivery and logistics technologies. All things considered, it is predicted that e-commerce in India will continue to expand strongly owing to shifting consumer habits and technological advancements.

REVIEW OF LITERATURE:

The literature review attempts to show how the discipline is relevant to the investigation by providing an overview of the sources that the researcher found. A review of the literature can provide the researcher with information on previous research on the topic, including the theories examined, methods employed, and knowledge gaps.

The factors influencing the behaviour of online customers were the topic of Kiran and Mittal's (2008) study, ATTITUDES, PREFERENCES AND PROFILE OF ONLINE customers IN INDIA: CHANGING TRENDS. It also examines the impact of online ads on consumers' decisions to shop online. The study focusses on the mindset behind online buying and the current internet usage environment. The current study makes an effort to examine the variables impacting online purchases and consumer concerns from this angle.

In IMPACT OF COVID-19 PANDEMIC SITUATION ON CONSUMER BUYING BEHAVIOUR IN INDIAN MARKET-A REVIEW, Harshal and Simran (2020)2 discussed how the COVID-19 pandemic, people's shifting consumption patterns, and the lockdown caused panic buying, with people rushing to stock up on necessities. India is a country that greatly relies on social communities for group activities. Along with this, they examined how the COVID-19 pandemic in India would affect customer behaviour in a number of businesses.

According to the SECTOR FLASH: E-COMMERCE MARKET IN INDIA (2021)3 research, the COVID-19 pandemic has changed the way people buy products and services. Due to the existing accepted standards of social distancing and limited mobility, consumers are shifting towards e-commerce. Consumers increasingly purchase anything from name-brand products to generic goods from online shops rather than from physical stores, supermarkets, and shopping malls. The e-commerce sector has responded well and seized the opportunity. Innovative solutions and the increase of coverage within the e-commerce spectrum have enabled unprecedented development and the launch of new digital firms. E-commerce companies are always expanding their reach outside of the big cities.

OBJECTIVES OF THE STUDY:

- The aim of this study is to investigate the degree of awareness of customer satisfaction in the context of e-commerce, with a particular focus on the Rewa District in Madhya Pradesh.
- To acquire knowledge about the marketing strategy employed by e-commerce.
- To ascertain the Rewa District's customers' inclination for online product purchases.

METHODOLOGY:

Any research project begins with defining the problem, followed by investigation and selection of the most effective path of action. Research methodology is the study of the methods used in research. In this study, various aspects of the research process are covered, including objectives, research design, study scope, study duration, sample design, data collection methods, questionnaire design, data analysis, and statistical tools.

The research design used in this study combines exploratory and descriptive methods. The study on e-commerce in the Rewa District chose its participants using a stratified random sampling technique. Data for this specific research project came from primary as well as secondary sources. The technique of using questionnaires to collect data was used for this study. A sample size of 140 participants was selected. The sample units will be individual Rewa City customers of various ages, genders, income levels, and occupations who have visited online platforms for purchasing or other activities.

FINDINGS:

Table Number – 1.1 Demographic Profiles of the Respondents

DEMOGRAPHICPROFILE			
Demographic Profile(N=140)	**Description**	**Frequency**	**Percentage**
Gender	Male	94	67.15
	Female	46	32.85
Marital Status	Single	84	60.00
	Married	56	40.00
Nature of Family	Nuclear Family	45	32.14
	Joint Family	95	67.85
Place of Living	Urban	92	65.71
	Semi-Urban	38	27.14
	Rural	11	07.85
Age of the Respondents	17-21	13	9.28
	22-24	39	27.85
	25-28	88	62.85
Educational Qualification	Under Graduate	94	67.14
	Post Graduate	47	33.57

Descriptive Statistics(Age)			
Mean	Std. Deviation	Minimum	Maximum
23.578	2.149	17	28

Source- Compiled by researcher from primary survey data

As can be seen from Table 1.1, the majority of respondents (67.15%) are male (67.15%), single (60%), in joint families (67.5%), live in cities (65.71%), are between the ages of 37 and 42 (62.5%), hold an undergraduate degree (67.14%), and have experience in engineering (46.42%). It can be seen from the descriptive data that the employees who took part in the evaluation ranged in age from 17 to 28. Using a standard deviation of 2.149, the average age was 23.578.

Table No. 1.2- Descriptive Statistics of Market Share of E-commerce

Variables Relating to Market share of E-Commerce	MS A	Commonality ties
Awareness	0.84 2	0.661
Financial Risk	0.68 0	0.707
Prize	0.75 7	0.420
Quality	0.89 2	0.447
Quantity	0.88 2	0.401
Adequate Facilities	0.86 2	0.592
Uncertainty of Marketing	0.86 6	0.566
Social Media approach	0.86 6	0.554
Trust	0.85 2	0.671
Delivery Process	0.87 6	0.557

Source- Compiled by researcher from primary survey data

The market share of electronic commerce is shown in descriptive statistics in Table 1.2. Upon examination, it is evident that Quality has the highest rating of 0.892. With a 0.757 score, Prize is the mediating component. Financial Risk is the lowest component in the E-Commerce market share.

RECOMMENDATIONS:

Introduce community-driven delivery programs for the elderly and set aside certain delivery times to encourage the most marginalised people to participate in e-commerce. Assure vulnerable clients that they will be protected from unfair business practices and dangerous merchandise. Reduce barriers to trade, logistics, postal services, connectivity, and other e-commerce-enabling factors patterns that are currently prevalent on social media. Companies in India are beginning to actively engage with their clientele on well-known social media sites like Facebook, Myntra and Amazon as the country's use of social media grows.

CONCLUSION:

In India, e-commerce is completely changing how people buy and sell goods and services. E-commerce is where shopping is headed. The gap between the manufacturer and the customer has shrunk thanks to e-commerce. With the magnitude of the Indian population, e-commerce has enormous potential. In India, just 19% of individuals use the internet to purchase and sell goods and services at the moment. As a result, the remaining portion of the Indian market reflects unrealised potential. With the implementation of all required elements—such as the creation of cyber infrastructure and the satisfaction of people's needs—e-commerce in India has a bright future ahead of it. Creating an extensive legal framework for e-commerce is the main duty of the government. This framework should ensure fundamental rights including intellectual property, privacy, fraud prevention, and safeguarding consumers while promoting the expansion of international as well as domestic trade. Even though a lot of businesses, associations, and communities in India are beginning to take advantage of e-commerce's potential, a lot of issues still need to be resolved before e-commerce can really help the majority of people. E-commerce has now become an everyday habit for all of us. Since its inception as an interface for marketing, the Indian e-commerce industry has grown significantly, offering one-touch buying and selling. Although industry predictions differ, the consumer digital economy of India is expected to grow at a substantial rate. Due to the nation's quickly growing internet connectivity and increasing smart phone usage, online activities such as e-commerce and electronic payment methods are growing.

LIMITATIONS OF THE STUDY:

The findings may not be as broadly applicable to other areas or people due to the study's focus being restricted to Madhya Pradesh's Rewa City. Without additional study, the conclusions could not be applicable to larger contexts because consumer behaviour can vary significantly throughout geographic locations. The evaluation is predicated on a survey directed towards participants who either possess an internet connection or are cognisant of the existence of online purchasing, e-commerce, and mobile commerce. Erroneous recollections of their purchasing behaviour or socially acceptable comments from participants could compromise the validity of the results. Sample size and representativeness issues could provide a challenge for the study.

Time and financial limitations may limit the sample size and diversity, which could have an impact on the results' validity and generalisability.

FUTURE SCOPE OF THE STUDY:

- This study was done from the perspective of the customer, but it might have been done with the online merchant in mind as well.
- Future studies in this field can employ a larger sample size.
- Between customers in Rewa City's rural and urban areas, as well as between consumers in other states or cities, a comparative analysis may be carried out.

REFERENCES:

Website

- https://www.ibef.org/industry/ecommerce
- https://www.mordorintelligence.com/industry-reports/india-ecommercemarket
- https://www.businessstandard.com/article/companies/flipkart-has-biggest-piece-of-indian-e-tailpie-115032100041_1.html
- https://www.ikonmarket.com/marketinsights/e-commerce-industryindia.html
- https://www.imarcgroup.com/india-ecommerce-market

Journals:

- Kiran, R., Sharma, A., & Mittal, K. C. (2008). Attitudes, preferences and profile of online buyers in India: Changing trends. South Asian Journal of Management, 15(3), 55-73.
- Varade, H., & Makhija, S. (2020). Impact of covid-19 pandemic situation on consumer buying behaviour in Indian market-A Market Review. International Journal for Research in Applied Science and Engineering Technology, 8(5), 2583-2589.

Reports:

sector-flash-ecommerce-market-in-india.pdf (grantthornton.in)

Cyber-Crimes and Their Impacts: Issues and Challenges

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ABSTRACT

Every new technology comes with its own set of drawbacks. Take the computer, for example. While it has made our lives easier, smoother, and faster, the rise of online computer processing has also made us highly vulnerable to cyber threats. In the current era, there are numerous cyber threats whose behaviors are difficult to understand, especially in the early stages of an attack. Some cyber attacks are intentional and malicious, while others occur unintentionally.

The intentional, criminal cyber attacks can have serious societal impacts, disrupting the economy and causing psychological harm. Restricting these cyber crimes requires a thorough analysis of their behaviors and an understanding of their wide-ranging effects - on government, socio-political systems, the defense sector, consumer trust in various service industries, and more.

Therefore, this paper aims to provide a procedural understanding of cyber crimes and their impacts across different sectors, as well as an exploration of emerging cyber threat trends for the future.

Keywords: - Cybercrime, Consumer trust, Soci-eco-poltical, Security, Cyber attacks

INTRODUCTION

The present era is characterized by rapid advancements that often hinder the effective use of time to enhance performance. The Internet stands out as one of the most rapidly evolving sectors in technical infrastructure development, with millions of computers interconnected globally. In contemporary society, information and communication technologies (ICTs) are crucial for driving digitization. While the Internet is an integral part of daily life for many, it also harbors a darker aspect: cybercrime. Cybercrime is generally defined as actions that compromise the confidentiality, integrity, and availability of an entity's online presence or networks. It encompasses all activities conducted with criminal intent in the digital realm. Due to the anonymous nature of the Internet, offenders engage in a wide range of illicit activities. The domain of cybercrime is still in its infancy, with new forms of criminal behavior emerging regularly. Cybercrimes can be broadly categorized into three primary types:

- Cybercrimes against individuals,
- Cybercrimes against property, and
- Cybercrimes against governmental entities.

The following are seven prevalent types of cybercriminals:

1) Script kiddies: Individuals who aspire to be hackers but lack substantial technical skills, typically targeting poorly secured systems.
2) Scammers: Often found in your email inbox, these individuals promote fraudulent offers such as discounted pharmaceuticals or dubious personal ads.
3) Hacker groups: Operating anonymously, these collectives develop hacking tools and may engage in hacking for non-criminal purposes, sometimes being contracted by companies to assess their security.
4) Phishers: If you have received emails claiming that your bank account is at risk, be wary; these individuals seek your personal information and likely aim to steal your identity by directing you to counterfeit websites.
5) Political, religious, or commercial groups: These entities often pursue agendas that do not prioritize financial gain.

The current age is marked by a swift pace that often limits the effective utilization of time to enhance performance metrics. The Internet is recognized as one of the most rapidly advancing domains in the development of technical infrastructure, with millions of computers linked worldwide. In today's context, information and communication technologies (ICTs) are essential for facilitating digitization. While the Internet is a staple in everyday life, it also presents a significant challenge in the form of cybercrime. Cybercrime is typically defined as actions that threaten the confidentiality, integrity, and availability of an entity's online presence or networks. It encompasses all activities carried out with malicious intent in the digital space.

CATEGORIES OF CYBER CRIME

1. THEFT OF TELECOMMUNICATIONS SERVICES

The phenomenon of "phone phreaking," which emerged three decades ago, has laid the groundwork for a significant criminal enterprise. By infiltrating an organization's telephone switchboard (PBX), individuals or criminal groups can access dial-in and dial-out circuits, enabling them to make unauthorized calls or sell call time to third parties (Gold 1999). Perpetrators may gain entry to the switchboard by impersonating a technician, fraudulently acquiring an employee's access code, or utilizing readily available software from the internet. Some advanced offenders employ techniques to loop between PBX systems to avoid detection. Other methods of service theft include capturing "calling card" information and reselling calls charged to those accounts, as well as counterfeiting or illicitly reprogramming stored value telephone cards.

2. COMMUNICATIONS IN FURTHERANCE OF CRIMINAL CONSPIRACIES

Similar to how legitimate entities in both the private and public sectors depend on information systems for communication and record-keeping, criminal organizations also leverage technology to enhance their operations. There is substantial evidence indicating that telecommunications equipment is utilized to support organized activities such as drug trafficking, gambling, prostitution, money laundering, child pornography, and arms trade in jurisdictions where these actions are prohibited. The implementation of encryption technology may render criminal communications inaccessible to law enforcement agencies. The use of computer networks for the production and distribution of child pornography has garnered increasing scrutiny. Presently, such materials can be transmitted across international borders almost instantaneously (Grant, David and Grabosky 1997). The more visible forms of internet child pornography exhibit a certain level of organization, necessitated by the infrastructure of Internet Relay Chat (IRC) and the World Wide Web (WWW), yet the activity predominantly appears to be carried out by individuals. In contrast, some of the less conspicuous trafficking in child pornography seems to involve a higher degree of organization.

3. TELECOMMUNICATIONS PIRACY

The advent of digital technology has enabled flawless reproduction and effortless distribution of printed materials, graphics, audio, and multimedia content. This ease of access has led many individuals to succumb to the temptation of reproducing copyrighted works for personal enjoyment, selling them at reduced prices, or distributing them freely. Such actions have raised significant alarm among copyright holders. It is estimated that the industry incurs annual losses ranging from US$15 billion to US$17 billion due to copyright violations (United States, Information Infrastructure Task Force 1995, 131).

The Software Publishers Association reported that in 1993, piracy resulted in a loss of approximately $7.4 billion in software, with $2 billion of that amount attributed to theft via the Internet (Meyer and Underwood 1994).

4. DISSEMINATION OF OFFENSIVE MATERIALS

There is a vast array of content deemed objectionable by various individuals available in cyberspace. This includes, but is not limited to, sexually explicit content, racist propaganda, and guides for creating incendiary and explosive devices. Telecommunications systems can also facilitate harassment, threats, or intrusive communications, ranging from traditional obscene phone calls to modern forms of "cyber-stalking," where persistent messages are directed at an unwilling recipient.

In one notable incident, a man allegedly appropriated nude photographs of his ex-girlfriend and her new partner, subsequently posting them online alongside her personal information, including her name, address, and phone number. The unfortunate couple, residing in Kenosha, Wisconsin, received unsolicited calls and emails from individuals as distant as Denmark, claiming to have viewed the images online. Investigations further uncovered that the suspect was tracking the woman's movements and gathering information about her family (Spice and Sink 1999).

In another instance, a spurned admirer posted online invitations under the name of a 28-year-old woman, falsely claiming that she harbored fantasies of rape and gang rape.

5. ELECTRONIC MONEY LAUNDERING AND TAX EVASION

For an extended period, electronic funds transfers have played a significant role in obscuring and facilitating the movement of criminal proceeds. Advancements in technology are poised to further obscure the origins of illicit gains. Additionally, income derived from legitimate sources may also be more effectively hidden from tax authorities. The capability to execute electronic funds transfers across multiple jurisdictions at remarkable speeds will no longer be exclusive to large financial institutions. The rise of informal banking entities and alternative banking systems may allow for the circumvention of central bank oversight, while also enabling the evasion of cash transaction reporting obligations in countries that enforce such regulations. Traditional underground banking systems, which have thrived in various Asian nations for centuries, will gain enhanced capabilities through advancements in telecommunications. With the rapid development and widespread adoption of electronic commerce technologies, it is increasingly likely that conventional strategies aimed at combating money laundering and tax evasion will soon become less effective. It may soon be possible for me to engage in the sale of illicit substances, receiving an untraceable transfer of stored value to my "smart card," which I can then anonymously deposit into an account at a financial institution located in a jurisdiction that prioritizes client privacy. I would have the ability to access these funds discreetly as needed, transferring them back to my stored value card at my convenience.

6. ELECTRONIC VANDALISM, TERRORISM, AND EXTORTION

Our increasingly digitized society is now heavily dependent on complex data processing and telecommunications systems. Damage or interference with these systems can have catastrophic consequences. Whether motivated by curiosity or malice, electronic intruders can cause inconveniences at best and have the potential to inflict massive harm (Hundley and Anderson 1995; Schwartau 1994).

While this potential has not yet been fully realized, numerous individuals and protest groups have hacked the official web pages of various government and commercial organizations (Rathmell 1997). The reverse is also true - in early 1999, an organized hacking incident apparently targeted the server hosting East Timor's internet domain as it sought independence from Indonesia (Creed 1999).

Defense planners worldwide are investing heavily in information warfare tactics to disrupt adversaries' IT infrastructure (Stix 1995). Attempts have been made to compromise the computer systems of the Sri Lankan government (Associated Press 1998) and NATO during the 1999 bombing of Belgrade (BBC 1999). One case illustrates the transnational reach of extortionists - German hackers compromised a Florida ISP, disabled 8 of its 10 servers, obtained customer data and credit card details, and demanded a $30,000 ransom (Bauer 1998). More recently, an extortionist in Eastern Europe obtained customers' credit card details from a North American online music retailer and published them online when the retailer refused to comply with demands (Markoff 2000).

In summary, the reliance of modern society on interconnected digital systems has created new vulnerabilities that malicious actors are increasingly exploiting through electronic vandalism, terrorism, and extortion.

IMPACT (ISSUES)

1. The Impact of Cyber-Crime on Businesses: The FBI and the Department of Justice report a significant increase in cyber-crime affecting American

businesses, resulting in substantial financial losses. Cyber-crime encompasses a range of malicious activities aimed at compromising a company's digital security. The intent behind these electronic intrusions may include the theft of financial data belonging to the business or its clients, disrupting access to the company's website, or deploying malware that tracks the organization's online behavior for future exploitation. To safeguard against these online threats, companies must invest considerable resources. This includes expenses related to risk assessment, the development of enhanced operational protocols, and the acquisition of protective software and hardware. For organizations with intricate or sensitive operations, it often necessitates the engagement of a cyber-security consultant to create tailored solutions. Furthermore, the initial investment in security measures is only part of the equation; ongoing testing and monitoring of these systems are essential to ensure their effectiveness against evolving cyber threats. These expenses are frequently transferred to consumers through increased prices for products and services. Additionally, the landscape of cyber-crime has evolved to include a new faction known as cyber-activists. These individuals function as the digital counterparts to traditional protesters, aiming to disrupt a company's online activities to convey their discontent regarding the company's practices. In recent years, prominent corporations such as PayPal and MasterCard have faced significant cyber-attacks.

2. The Influence of Cyber Crime on Young People:

Cyber communication represents the latest evolution in societal interaction. Platforms for online social networking, along with text messaging and email, offer users a swift and effective means of connecting with individuals globally. Adolescents, in particular, dedicate numerous hours each day to online activities, utilizing computers and personal electronic devices.

Friendships: According to Family-rescource.com, 48 percent of teenagers believe that the Internet enhances their friendships. As social networking sites gain popularity, young individuals can maintain connections with both real-life and online friends. Some adolescents feel that these cyber relationships empower them to express their authentic selves. Instant messaging applications, utilized by approximately 13 million teenagers, facilitate real-time conversations with peers. Online communication tools foster the development of friendships with other youths, regardless of geographical distance.

Writing: Despite the extensive time teenagers spend online, engaging in cyber communication does not necessitate formal writing abilities. In fact, the opposite tends to occur; young people frequently employ shorthand, abbreviations, or slang in their online writing. The National Commission on Writing reports that 85 percent of teenagers engage in social networking communication, yet 60 percent do not regard this mode of communication as "writing." It is essential for adolescents to recognize the distinction between formal and informal writing and to understand when informal writing is inappropriate, particularly in academic settings.

Cyber Bullying: One detrimental consequence of online communication among youth is cyber bullying. Victims often endure the spread of rumors and falsehoods on social networking platforms. Perpetrators may share inappropriate or humiliating images of their targets. Additionally, cyber bullying can manifest through malicious text messages intended to harass. The National Crime Prevention Council indicates that nearly half of American teenagers are affected by cyber bullying. In severe instances, some adolescents have tragically taken their own lives due to the impact of cyber bullying.

Sexual Solicitation: The issue of sexual solicitation is an escalating concern for young individuals who engage in various forms of cyber communication.

FUTURE NEEDS AND CHALLENGES

Certain problematic areas warrant consideration, including Telecommunications, electronic vandalism, terrorism and extortion, theft of telecommunications services, telecommunications piracy, pornography and other objectionable content, telemarketing fraud, electronic fund transfer crimes, and electronic money laundering.

Legal responses and challenges: Below are several rhetorical inquiries regarding the legal framework surrounding the search and seizure of electronic evidence. These questions were developed in October 1998 during a specialized expert working group meeting held in Tokyo, organized under the auspices of the United Nations and with participation from the Australian Institute of Criminology.

Investigative issues

(i) Is there a legal distinction between the search and seizure of data stored on a computer and the interception of data being transmitted between computers or within a computer network?

(ii) Is it permissible for an individual to voluntarily provide law enforcement officials with electronic data that may serve as evidence of a crime? Can an individual allow law enforcement to conduct a search for such data instead of directly providing it? Might ongoing cooperation of this nature influence the legal standing of law enforcement in obtaining or utilizing the data?

(iii) In many jurisdictions, law enforcement's ability to access data that may serve as evidence typically necessitates some form of prior judicial authorization. What legal basis is required to obtain electronically stored data without the consent of the individuals involved?

(iv) In most jurisdictions, electronic data is classified as intangible. Some jurisdictions may only allow the seizure of tangible items. In such instances, intangible data can only be accessed by seizing the physical medium (e.g., a diskette or other storage device) on which the data resides. Do the laws of your nation allow for the seizure of intangible data without also seizing the physical medium on which it is stored?

FUTURE TRENDS IN CYBER CRIME

The rapid escalation of cybercrime represents one of the most alarming trends in contemporary society. Valerie McNiven, an advisor to the U.S. Treasury, has stated, "Last year marked the first instance where the financial gains from cybercrime surpassed those from the illegal drug trade, amounting to over $105 billion." She further emphasized that "the velocity of cybercrime is such that law enforcement agencies are struggling to keep pace." It is evident that this issue is poised to worsen in the coming years, particularly as professionals recognize the lucrative opportunities that can be exploited.

Recently, there has been considerable discourse regarding the convergence of organized crime and cybercriminal activities. This combination indeed portends a grim outlook for the near future. With many criminal organizations operating from regions such as Eastern Europe, Russia, and Asia—where legal frameworks and enforcement are minimal—there appears to be little hope of mitigating this threat through conventional methods. Phil Williams, a visiting scientist at CERT, encapsulated the situation succinctly: "The Internet serves as both a conduit and a target for criminal activities, allowing for significant exploitation with a remarkably low risk. For organized crime, this is an ideal scenario."

Consequently, one can anticipate a rise in sophisticated phishing schemes and other identity theft tactics that may adopt a dual approach. For instance, criminals might utilize call centers to preemptively inform "customers" of purported issues, subsequently following up with emails soliciting personal information. The consolidation of personal data in numerous third-party data centers will present lucrative targets for infiltration. It is not difficult to envision criminals employing data mining techniques to identify the most susceptible consumers or customizing phishing emails based on individuals' medical, financial, or personal backgrounds. Furthermore, identity theft is likely to become increasingly automated, with botnets evolving into tools not only for denial-of-service attacks and spam but also for more sophisticated criminal endeavors.

CONCLUSION

The capacity of the human mind is vast and complex. Completely eradicating cybercrime from cyberspace is an unattainable goal. However, it is feasible to mitigate its occurrence. Historical evidence demonstrates that no legislative measure has successfully eradicated crime entirely from the world. The most viable approach is to educate individuals about their rights and responsibilities, emphasizing the collective duty to report crimes for the benefit of society. Additionally, enforcing laws with greater rigor is essential to curtail criminal activities. The enactment of the current legislation marks a significant milestone in the realm of cyberspace. Nevertheless, I acknowledge the necessity for amendments to the Information Technology Act to enhance its effectiveness in combating cybercrime. I would like to caution proponents of stringent legislation to consider that overly harsh provisions may hinder industry growth and yield counterproductive outcomes.

The future of the Internet remains uncertain, caught between the interests of criminals and ordinary users. Concerns regarding a potential cyber apocalypse persist, as the scale of damage from widespread fraud is virtually limitless. These fears should be balanced with the understanding that efforts are underway to address these issues, albeit perhaps not at an adequate pace. The Internet has demonstrated its value in countless ways, which should help prevent it from devolving into a haven for criminal activity. While the government plays a crucial role, the primary responsibility for prevention lies with commercial entities that develop software and possess the capability to thwart fraud. Relying solely on consumer education initiatives will only reach a fraction of potential victims. Others must be safeguarded through automatic measures that do not impose significant burdens on users. Security solutions must be both straightforward and effective to be truly functional. The relevance of cybercrime a decade from now remains uncertain, but the trajectory of the Internet will undoubtedly influence this outcome.

The Role of Social Media Humor in Enhancing Quality of Work Life and Mitigating Occupational Stress

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ABSTRACT

This study investigates the impact of social media humor on quality of work life (QWL) and occupational stress. In today's digital age, where online interactions play a crucial role in workplace dynamics, humor shared on social media platforms has surfaced as an effective coping mechanism. The research aims to understand how humor can cultivate a positive work atmosphere, boost employee engagement, and reduce stress levels. By examining the role of humor in fostering interpersonal connections and enhancing workplace morale, this study seeks to highlight its potential benefits for overall employee well-being. The model delineates the relationship among social media humor, quality of work life (QWL), and occupational stress. It highlights humor as a coping mechanism that cultivates a positive work environment and enhances employee engagement. By illustrating these connections, the model underscores the potential of social media humor to contribute significantly to overall employee well-being and mitigate occupational stress. The findings will contribute to the growing body of literature on innovative strategies for managing occupational stress and improving QWL, suggesting that integrating humor into workplace culture may lead to a more resilient and satisfied workforce.

Key words*: Social media, digital humor, occupational stress, quality of work life, job satisfaction, coping strategy, employees well-being.*

INTRODUCTION

In today’s fast-paced work environment, occupational stress is a significant challenge impacting employee well-being and productivity. Traditional coping mechanisms are often insufficient, leading to increased interest in alternative strategies. This article investigates the role of social media humor as a modern tool for managing stress and enhancing QWL. By analyzing the relationship between humor and workplace dynamics, we aim to provide insights into how humor can be leveraged to create a more supportive and productive work atmosphere. In this digital era social media has become a significant platform for humor, allowing individuals to share, create, and consume various forms of comedic content. This phenomenon, often referred to as social media humor, encompasses memes, funny videos, and humorous posts that resonate with users across different platforms. While humor is widely recognized for its ability to uplift spirits and foster connections, its role in the workplace, particularly concerning quality of work life and occupational stress, warrants deeper exploration.

Social media humor can play a pivotal role in enhancing the quality of work life (QWL). When employees engage with humorous content online, they often experience a momentary escape from the pressures of their job. This can be particularly beneficial in high-stress environments where demands and deadlines can lead to burnout. Laughter triggered by social media humor can improve mood, promote relaxation, and create a sense of community among colleagues. When shared within a workplace context, humorous content can serve as an icebreaker, fostering camaraderie and improving interpersonal relationships among employees.

Moreover, the sharing of funny content on social media can help reduce occupational stress. Occupational stress arises when the demands of a job exceed an individual's capacity to cope, leading to negative emotional and physical consequences. By providing a means of stress relief, social media humor can mitigate the adverse effects of job-related pressure. Engaging with humor can shift an employee's focus away from stressors, promoting a more positive outlook and enhancing resilience. Research indicates that individuals with a strong sense of humor are better equipped to handle stressful situations, enabling them to bounce back from challenges more effectively.

However, it is essential to consider the potential downsides of social media humor in the workplace. While humor can foster a positive atmosphere, it can also lead to misunderstandings or unprofessional behavior if not approached carefully. For instance, what one employee finds amusing, another might perceive as offensive or inappropriate. This highlights the need for awareness and sensitivity regarding the type of humor shared within professional settings. Organizations should encourage a culture of inclusivity, ensuring that humor does not alienate or marginalize any group of employees.

Furthermore, the overuse of social media humor as a coping mechanism for occupational stress may indicate a deeper issue within the workplace environment. If employees frequently resort to humor to escape their responsibilities or to cope with excessive stress, it may signal the need for organizational changes. Addressing the root causes of occupational stress—such as unrealistic workloads, lack of support, or inadequate resources—should take precedence over merely relying on humor as a band-aid solution.

LITERATURE REVIEW

Here’s a literature review focusing on social media humor and its impact on quality of work life (QWL) and occupational stress. Research indicates that humor serves as a valuable coping strategy, helping individuals navigate stress and foster resilience (Martin, 2003). Additionally, social media platforms have transformed how humor is disseminated, creating communities that promote engagement and connection (Shifman, 2007). This literature review highlights the connections between humor, social media, and workplace relationships, drawing on studies that demonstrate the psychological benefits of humor (Samson & Gross, 2012) and its role in enhancing QWL (Kossen, 1986).

Humor and Stress Relief: Martin, R. A. (2003) in his foundational study highlights humor's role as a coping mechanism for stress, suggesting that individuals who use humor effectively tend to experience lower stress levels. The findings imply that humor can be a valuable tool in the workplace, promoting resilience among employees.

Social Media as a Humor Platform: Shifman, L. (2007) explores how humor is disseminated through digital media, particularly social media platforms. It discusses the impact of viral humor and how it fosters community and engagement among users, which can translate to workplace dynamics.

Quality of Work Life: Kossen, C. (1986) in his work defines quality of work life, emphasizing its relationship with job satisfaction, work environment, and employee well-being. Integrating humor into the workplace can enhance QWL by fostering a positive atmosphere.

Impact of Humor on Workplace Relationships: Cooper, C. L., & Marshall, J. (1976) identifies the importance of interpersonal relationships in the workplace. Humor can act as a social lubricant, facilitating better communication and collaboration among employees, thus improving QWL.

Humor as a Coping Strategy: Reyes, J. A. et al. (2012) in his research investigates humor as a coping strategy in high-stress occupations. It highlights that employees who engage with humor through social media report better coping mechanisms, leading to reduced occupational stress.

Workplace Stressors: Robbins, S. P., & Judge, T. A. (2015) discusses various sources of occupational stress, emphasizing the need for effective coping strategies. The authors suggest that humor can mitigate these stressors, promoting a healthier work environment.

Digital Humor and Employee Engagement: Bakker, A. B., & Demerouti, E. (2007) introduces the Job Demands-Resources model, which posits that positive resources, such as humor, can enhance engagement and decrease burnout among employees.

Cultural Considerations in Humor: Yue, X. (2010) examines how cultural perceptions of humor can impact workplace dynamics. It emphasizes that social media humor can either unite or divide employees, depending on its appropriateness and inclusivity in diverse work environments.

Psychological Benefits of Humor: Samson, A. C., & Gross, J. J. (2012) in his his study delves into the psychological benefits of humor, suggesting that it can enhance emotional well-being. Incorporating humor into the workplace can promote positive emotions, thus improving QWL.

Longitudinal Effects of Humor in the Workplace: Wilkins, J. (2011) examines the sustained effects of humor on workplace morale and stress levels. The findings indicate that organizations that promote a humorous culture experience lower turnover rates and higher employee satisfaction over time.

The literature indicates a strong connection between social media humor, quality of work life, and occupational stress. Humor serves as a vital coping mechanism and social tool in workplace settings. By fostering a humorous culture, organizations can enhance employee engagement, improve relationships, and ultimately create a more positive work environment. Future research should continue to explore the nuanced effects of humor, considering cultural contexts and individual differences in humor appreciation.

RESEARCH METHODOLOGY

This study employs a mixed-methods approach, combining quantitative surveys and qualitative interviews to gather data from employees across various sectors. Participants will be asked about their use of humor on social media, perceived levels of occupational stress, and their overall quality of work life. The research design to investigate the relationships between social media humor, quality of work life (QWL), and occupational stress, that facilitates the collection and analysis of numerical data to establish correlations and causal relationships among the variables. This methodology aims to provide a comprehensive understanding of how social media humor can positively influence QWL and reduce occupational stress, contributing to the development of effective workplace interventions.

This study proposes a stratified random sampling technique will be used to select participants from various industries to ensure a diverse representation. The target population will include employees who actively engage in social media for professional purposes. Data will be gathered through an online survey consisting of validated instruments measuring the following variables:

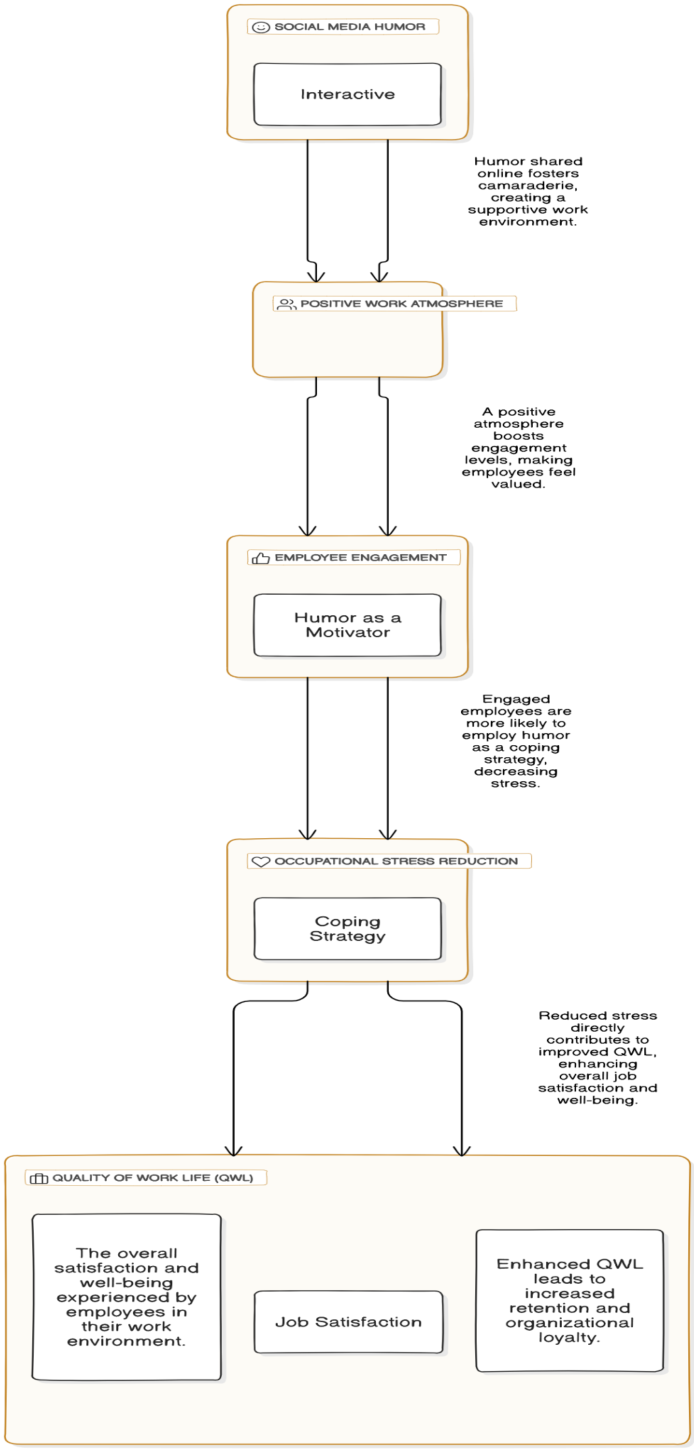
a) social media humor (SMH) i.e. a scale assessing the frequency and context of humor shared on social media platforms in the workplace b) quality of work life (QWL) i.e. a scale evaluating employees' perceptions of their work environment, job satisfaction, and overall well-being, c) occupational stress (OS) a standardized stress assessment tool will be used to measure the levels of stress experienced by employees in their work settings.

A Model Overview: The Impact of Social Media Humor on Quality of Work Life and Occupational Stress

The data collected will undergo structural equation modelling (SEM) to test the proposed relationships among the variables. The model will be constructed based on theoretical foundations and previous literature, integrating humor as a mediating factor between social media engagement and its effects on QWL and occupational stress. The significance of the model will be evaluated using fit indices to determine how well the data supports the proposed framework. Ethical Considerations and approval will be obtained from the relevant institutional review board. Informed consent will be secured from all participants, ensuring anonymity and confidentiality throughout the research process.

This model illustrates the relationship between social media humor, quality of work life (QWL), and occupational stress. It emphasizes how humor functions as a coping mechanism that fosters a positive work environment, enhances employee engagement, and ultimately contributes to overall employee well-being. The following are the components of the model:

Impact of Social Media Humor on Quality of Work Life and Occupational Stress



Level 1- Social media humor content shared on platforms such as Facebook, Twitter, and Instagram that promotes laughter and connection among colleagues. The relatable characteristics are interactive and culturally relevant humor that resonates with employees.

Level 2 - Positive work atmosphere that includes mechanisms, interpersonal connections that means humor facilitates social bonding; improving relationships among employees, light hearted interactions enhance open communication, reducing barriers. This results to increased trust, collaboration, and overall workplace satisfaction.

Level 3 - Employee engagement is the emotional commitment employees have towards their work and organization with the influencing factors humor as a motivator humor boosts morale and motivation, leading to greater investment in work tasks. A humorous environment encourages active participation in team activities and discussions. It has a positive outcome of higher productivity, creativity, and job satisfaction.

Level 4 - Occupational stress reduction is the mechanisms and coping strategy where humor serves as a healthy way to deal with stressors and challenges in the workplace. It brings psychological benefits like laughter reduces anxiety and promotes a positive mindset. It may result to lower stress levels, reduced burnout, and improved mental health.

Level 5 - Quality of Work Life (QWL) is the overall satisfaction and well-being experienced by employees in their work environment. The key indicators job Satisfaction i.e contentment with job roles and responsibilities, work-life balance that means the ability to manage work demands alongside personal life. QWL leads to increased retention and organizational loyalty.

Interconnections of the variable:

- Social Media Humor → Positive Work Atmosphere: Humor shared online fosters camaraderie, creating a supportive work environment.

- Positive Work Atmosphere → Employee Engagement: A positive atmosphere boosts engagement levels, making employees feel valued.
- Employee Engagement → Occupational Stress Reduction: Engaged employees are more likely to employ humor as a coping strategy, decreasing stress.
- Occupational Stress Reduction → Quality of Work Life: Reduced stress directly contributes to improve QWL, enhancing overall job satisfaction and well-being.

This model illustrates the dynamic interplay between social media humor, workplace culture, and employee outcomes. By leveraging humor in digital interactions, organizations can create a more resilient workforce, ultimately improving quality of work life and reducing occupational stress. Future research can further validate this model and explore its practical implications in various workplace settings.

CONCLUSION

In summary, this research underscores the transformative potential of social media humor in enhancing quality of work life and reducing occupational stress. When leveraged effectively, humor can build a sense of community, offer relief from workplace pressures, and cultivate resilience among employees. However, organizations must ensure that humor is applied constructively and inclusively to create a supportive culture that addresses stressors. By fostering an environment where humor is appreciated and respected, organizations can promote a healthier workplace, ultimately leading to a more engaged and satisfied workforce. The positive implications of humor highlight its role as a valuable resource in achieving both individual well-being and organizational success.

In conclusion, social media humor holds significant potential to enhance quality of work life and alleviate occupational stress. When utilized appropriately, it can foster a sense of community, provide a necessary break from job demands, and promote resilience among employees. However, organizations must strike a balance, ensuring that humor is used constructively and inclusively. By creating a supportive workplace culture that addresses the underlying causes of stress, companies can harness the benefits of social media humor while safeguarding employee well-being. Ultimately, a positive approach to humor can contribute to a healthier work environment, where employees feel valued, supported, and engaged. Social media humor may represent a promising avenue for addressing occupational stress and enhancing QWL. As organizations seek innovative strategies to support their employees, understanding the role of humor in the workplace will be critical for fostering a resilient and engaged workforce.

LIMITATIONS OF THE STUDY

The model may be context-specific, potentially limiting its applicability across different industries or organizational cultures. Humor is inherently subjective, making it challenging to quantify its effects on QWL and stress uniformly. The research primarily focuses on immediate effects, necessitating further exploration of long-term outcomes related to sustained humor use.

SUGGESTIONS AND RECOMMENDATIONS

Organizations should consider implementing training programs that teach employees how to effectively use humor in a workplace setting, ensuring it is constructive and appropriate and develop policies that encourage the sharing of humorous content while maintaining professionalism, which can help establish a culture that values lightheartedness. Regularly assess social media interactions within the workplace to gauge the impact of humor on employee morale and engagement.

Future research should focus on longitudinal studies to assess the long-term effects of social media humor on QWL and occupational stress across diverse industries to investigate how cultural differences influence the perception and effectiveness of humor in the workplace, as this can significantly affect engagement and stress levels. It may help to establish feedback channels where employees can share their experiences with humor in the workplace, allowing organizations to make informed adjustments to their approach.

REFERENCES

1. Martin, R. A. (2003). The psychology of humor: An integrative approach. Academic Press.
2. Shifman, L. (2007). Digital humor: A new form of social communication. Journal of Communication, 57(4), 882-905. https://doi.org/10.1111/j.1460-2466.2007.00369.x
3. Kossen, C. (1986). Quality of work life: A concept for improving work environments. Journal of Occupational Behavior, 7(2), 171-184. https://doi.org/10.1002/job.4030070209
4. Cooper, C. L., & Marshall, J. (1976). Occupational stress: A review of the literature on job stress and health. Journal of Occupational Psychology, 49(1), 3-28. https://doi.org/10.1111/j.2044-8325.1976.tb00003.x
5. Reyes, J. A., et al. (2012). Humor as a coping strategy in high-stress occupations. Journal of Applied Psychology, 97(4), 691-698. https://doi.org/10.1037/a0026912
6. Robbins, S. P., & Judge, T. A. (2015). Organizational behavior (17th ed.). Pearson.
7. Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: Challenges and future directions. Journal of Managerial Psychology, 22(3), 309-328. https://doi.org/10.1108/02683940710733115
8. Yue, X. (2010). Cultural perceptions of humor: Impact on workplace dynamics. International Journal of Cross Cultural Management, 10(1), 59-75. https://doi.org/10.1177/1470595809361700
9. Samson, A. C., & Gross, J. J. (2012). Humor as a regulatory mechanism: The impact of humor on psychological well-being. Emotion, 12(5), 1001-1014. https://doi.org/10.1037/a0029827

10. Wilkins, J. (2011). The longitudinal effects of humor in the workplace: A study on morale and stress levels. Journal of Occupational Health Psychology, 16(3), 266-276. https://doi.org/10.1037/a0023712

Strategies for Small Business in Indian Market

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Abstract:

This paper identifies the strategies adopted by small businesses to adapt to the Indian market. Although small businesses face many challenges and opportunities due to competition. Through a combination of literature review, personal interviews and observational research, this paper also recognizes the key concepts such as business sense, regional scope, digital availability, cost, innovation, trust, government assessment, offline management and quality control of the supply chain and the responses to this customer survey provide insights into how small business owners and entrepreneurs drive growth.

Keywords: *small Business, Business Practices, employment, profit*

Introduction

Small businesses are important to the Indian economy and contribute to the employment of the unemployed and the country's GDP. The diversity and business environment pose challenges and opportunities to these small businesses. This study aims to identify the strategies, including leadership and marketing, adopted by small businesses to succeed in the Indian economy.

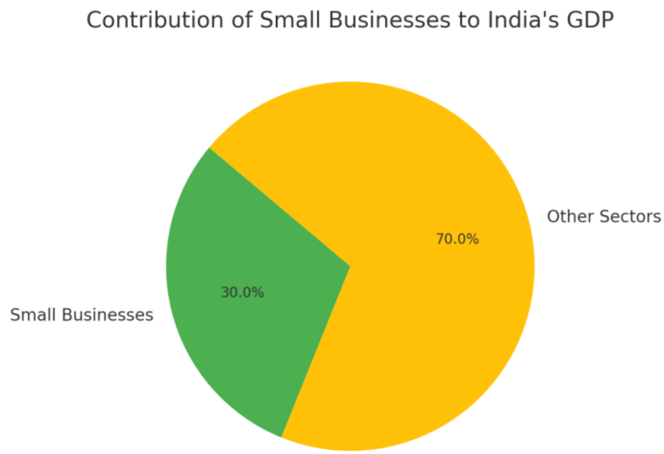
Small businesses are job creators, but the real question is how to stand out from the heavy competitors of small businesses. While the necessary factors such as financial assistance, infrastructure and technology need to be provided for the growth and development of small businesses in a developing country like India, marketing strategy has become an important factor for the long-term success of a small business. Small businesses are the breadwinners of the business cycle, but the problem is how can small businesses support themselves in this fierce competition to grow even more, besides various assistance, excessive financial assistance is needed to ensure growth and development.

Since more infrastructure is needed for the long-term success of a small business, the use of a good strategy is very important for the design and implementation of the strategy, it is important for the success of a small business. Small business can also grow virtuously, since it is beneficial to the people and citizens of the country, it can be concluded that the development of correct and effective implementation of marketing strategies is important for the success of small businesses.

Global competition has forced the company to raise its performance standards in many areas such as performance, cost, productivity, production time and efficiency. In this challenging business environment, small businesses need to improve themselves to be competitive, grow and succeed (mugler 2002). They should also create strategies not only by creating new products/ marketing strategies, but also by focusing on joint ventures and network strategies. business partners. According to Moore and Manring (2009), small businesses provide the internet.

Literature review

Small businesses are often considered the backbone of the Indian economy. They contribute to India's gross domestic product (GDP), which accounts for about 30% of its GDP. This scheme is crucial to support economic growth, especially during a recession. Small businesses contribute to the diversity of the economy by operating in multiple sectors, including manufacturing, services, retail, and agriculture. This diversification helps increase business stability by spreading risk across multiple sectors. Financial columns are shown by representation.

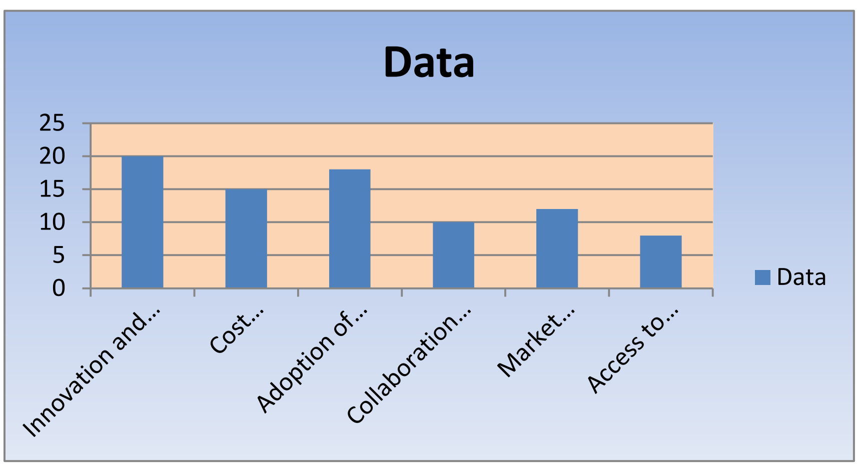


Small business development also helps to reduce the economic gap between urban and rural areas and is essential for economic development. Small businesses often operate in rural and suburban areas and provide products and services that large companies cannot provide. This will bridge the gap between urban and rural areas and contribute to balanced national development. Small businesses support local economies by providing local products and selling to the community. This brings in more profits, keeps cash flowing to the community, and benefits other local businesses. Small and medium enterprises are an important part of the Indian economy. They have contributed to employment generation in various sectors, skill development for rural development and export potential of India. Small enterprises operate in various scales and have various impacts.

Research Methodology

I also conducted several interviews with business owners, managers and key employees to gather information on the strategies they use. The open-ended nature of the interviews allowed respondents to share detailed and unbiased information about their experiences and decision-making processes, as well as observe the day-to-day activities of selected small and medium enterprises, such as attending meetings, observing conversations with employees and reporting to customers on how the business actually implemented the strategies. I also attempted to conduct a behavioral analysis to identify ideas from these activities based on innovation, cost, technology, communication, business and finance. Use the India business growth and expansion data and graphs below.

Sample	Data
Innovation and Product Differentiation	20
Cost Management	15
Adoption of Technology	18
Collaboration and Networking	10
Market Expansion	12
Access to Finance	8



Strategies of small business in Indian Market

Additions and Changes

Small businesses focus on creating unique products or services that stand out in the marketplace. This may involve innovations in design, operations, or customer experience, but they also try to identify specific needs in local markets or sectors so that people can use the product with self-awareness.

Expense Management

These businesses have adopted management practices to reduce waste and optimize resource use. This includes improving processes, reducing overhead, focusing on key resources, and building relationships with suppliers to negotiate better prices and produce long-lasting products. Consider local sourcing to reduce transportation costs and increase sustainability.

Adoption of Technology

Technology adoption also uses digital marketing tools like social media, search engine optimization, and online advertising to reach a wider audience at a lower cost than traditional marketing. They are also opening online stores or partnering with e-commerce platforms to sell their products beyond their local stores and tap into India's growing online market.

Accessing Funding

Explore financing options beyond traditional bank loans, such as microfinance, crowdfunding, angel investors, or venture capital. Government programs like the MSME (Micro, Small and Medium Enterprises) Credit Scheme can also be beneficial. Financial Planning Develop an effective financial plan that includes budgeting, forecasting, and financial management. This helps them maintain financial stability and plan for future growth.

Marketing and Networking

These businesses join trade associations, local business centers, and business networks to gain information, share resources, and collaborate through joint ventures. They also work with other businesses, including larger companies, to increase their resources, distribution networks, and customers.

Increase Revenue

Small businesses can build a loyal customer base before expanding by first establishing a strong presence in the local market. Once established locally, consider expanding to nearby areas or other states. Also, before entering a new market, they analyze business needs, competition, and culture to find export opportunities. Market research can be a useful option for companies with specialized products. The Indian government provides various incentives and support to small and medium-sized enterprises.

Customer Care

Low-level marketing focuses on building relationships with customers through quality service, personal relationships, and honest service. They regularly collect customer feedback and use it to improve their products, services and overall customer experience.

Flexibility and Agility

A willingness to quickly adapt to changes in business through new product launches, changes in business strategy or business improvements, and also plans to deal with economic challenges such as recessions, market disruptions or changes.

Government initiatives

Various important programs and incentives for SMEs such as government policy grants, tax concessions, skill development to support SMEs, and other national initiatives such as Digital India and Made in India space for visibility, support and business acquisition.

Sustainability and Growth - SMEs can also improve their reputation and build relationships with their communities by implementing environmental best practices such as waste reduction, energy conservation, sourcing of eco-friendly products, and contributing to a stronger community through community engagement. When implemented effectively, these strategies can help SMEs in India overcome challenges and capitalize on opportunities in the competitive market.

Challenges faced by SMEs

SMEs often face various challenges that can affect their survival and growth. Financial constraints hinder these companies because they do not have the capital that larger companies can use, making it difficult to invest in business, marketing, or expansion. Limited access to capital makes it difficult to weather recessions or invest in necessary reforms. In addition, SMEs may have difficulty competing with larger competitors on cost and quality. Market competition poses another major challenge as SMEs compete with manufacturers and companies with extensive market and brand recognition. Lack of authority over suppliers can lead to higher prices for goods and services, which can affect profits. In addition, introducing complex geographic management and compliance can be stressful for small business owners who often lack legal and compliance teams. Changing technology and the digital landscape can also pose challenges. Small businesses may struggle to keep up with rapid technological changes, which can make it difficult to reach online customers and compete in digital marketplaces. Small businesses may struggle to offer competitive pricing and benefits compared to larger businesses, making it difficult to recruit and retain employees. Despite these obstacles, the resilience, innovation, and community connections that many small businesses have shown have helped them overcome these challenges and gain a foothold in the marketplace. The business practices of small businesses are often determined by their owners. With fewer middle managers and employees, the owners of human resources become a key factor in determining direction. However, our analysis shows that business practices remain important even after considering various human factors. This means that these actions have an impact beyond the ability of the owner. However, it is still necessary for well-educated and skilled owners to more easily acquire and utilize good business practices.

Conclusion

This study examines some of the key strategies that Indian SMEs use to address business challenges. Understanding local markets, leveraging digital platforms, competitive pricing, continuous innovation, building trust, leveraging government strategies, maintaining an offline presence, managing supply chains, and leveraging customer strategies are critical to success. These findings have important implications for SME owners and policymakers and highlight the need for supportive policies and resources to support long-term growth.

Bibiliography

1. https://www.isca.me/IJMS/Archive/v2/i8/4.ISCA-RJMS-2013-064.pdf
2. Kalaskar Prasanna, Marketing Strategies for Standalone Hotels: With Reference to Mayur Aaditya Resort, Dharwad, India, Research
3. Jourhttps://www.researchgate.net/publication/220672147_Strategy_development_by_small_scale_industries_in_Indianal of Management Sciences, 2(5),14-19 (2013)
4. Indian Ministry of Micro, Small and Medium Enterprises. (2020). Annual Report.
5. Porter, M. E. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors. Free Press.
6. Rasulova, S. G., & Obidova, F. Y. (2019). Issues of small business development. ISJ Theoretical & Applied Science, 09 (77), 426-429. https://dx.doi.org/10.15863/TAS.2019.09.77.74
7. Susan Turner et al. (2017). Strategies for enhancing small Business owners' success rates. Journal of Applied Management and Technology. 16(1). https://doi.org/10.5590/IJAMT.2017.16.1.03
8. David Mckenzie et al. (2016). Business Practices in Small Firms in Developing Countries. Management Science. 63(9). https://doi.org/10.1287/mnsc.2016.2492 4

The Future of E-Commerce in the Metaverse: Opportunities, Challenges, and Strategic Implications

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Abstract

The rise of the metaverse represents a revolutionary change in the e-commerce environment by merging physical and digital realities into a unified virtual marketplace. This research paper examines the future of e-commerce in the metaverse by analyzing technological advancements, changes in consumer behavior, and strategic impacts on businesses. Through a comprehensive review of current literature, case studies, and market analysis, the paper explores the potential opportunities and challenges that e-commerce companies may face in the metaverse. The findings suggest that while the metaverse offers significant opportunities for personalized consumer experiences and new business models, it also presents challenges regarding privacy, cybersecurity, and regulatory compliance. The paper concludes with strategic recommendations for companies to successfully harness and leverage the e-commerce potential of the metaverse.

1. Introduction

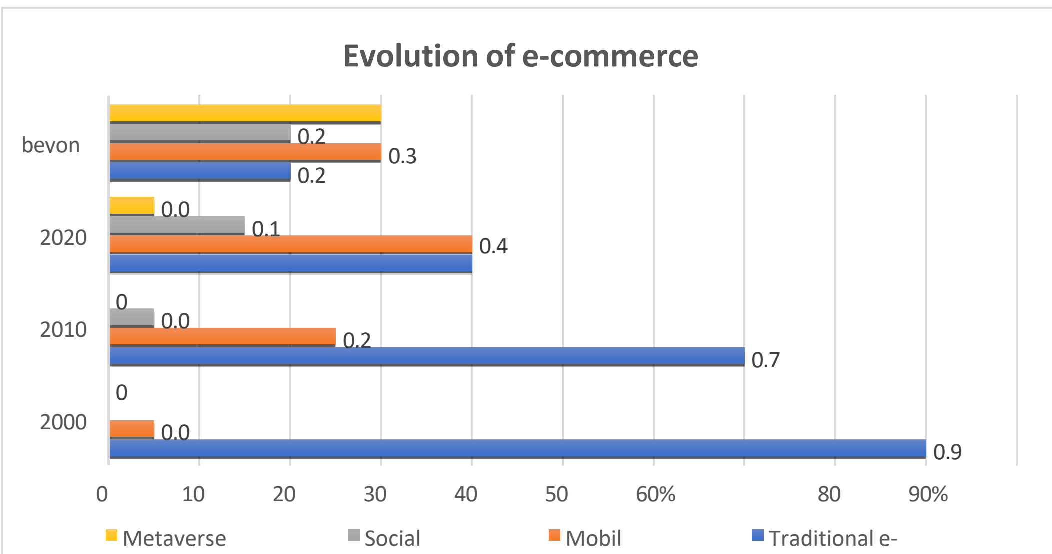
The concept of the metaverse has gained a lot of attention in recent years due to advancements in virtual reality (VR), augmented reality (AR), and blockchain technologies. The metaverse is a collective virtual shared space created by the merging of virtually augmented physical reality and physically persistent virtual space. This digital ecosystem allows users to interact with each other and their environment in real time, blurring the boundaries between the physical and digital worlds. As the metaverse continues to evolve, it is poised to become a leading platform for e-commerce and provide new opportunities for both businesses and consumers.

2. Literature review

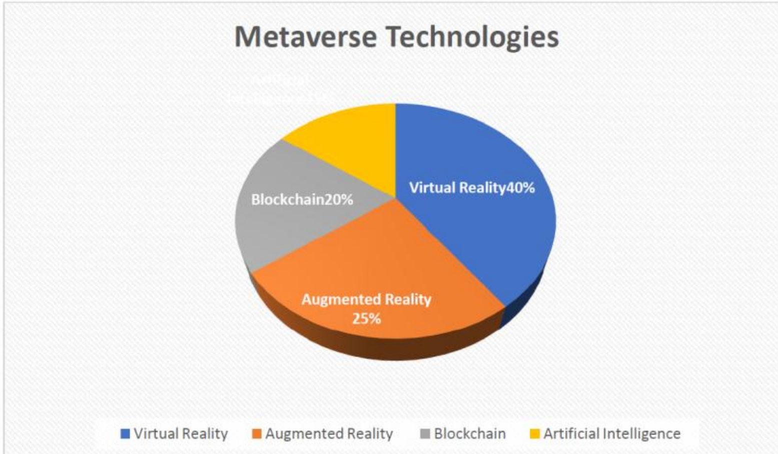
2.1. The evolution of e-commerce:

The transformation of e-commerce from traditional online shopping to an immersive virtual experience is well documented. Previous studies have highlighted the role of digital platforms, social media and mobile technologies in shaping consumer behaviour. However, the emergence of the metaverse introduces a new dimension to e-commerce where virtual goods, services and experiences can be bought and sold in a connected digital world.

2.2. Metaverse Technologies:



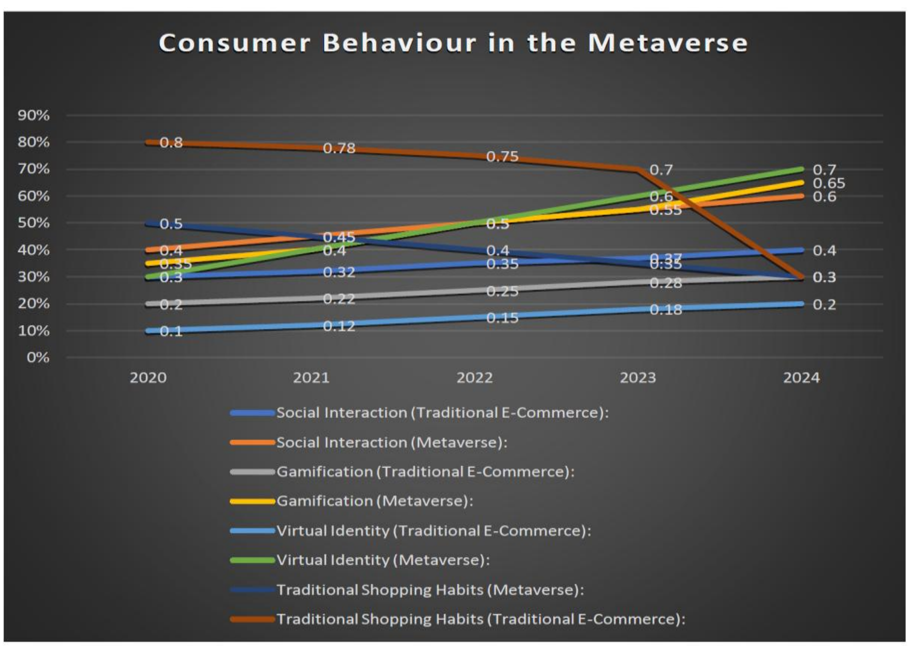
Key technologies enabling the metaverse include VR, AR, blockchain, and artificial intelligence (AI). VR and AR provide immersive experiences and allow consumers to interact with products in a virtual environment. Blockchain ensures secure transactions and verification of digital asset ownership, while AI increases personalization and customer engagement.



2.3. Consumer Behaviour in the Metaverse:

Research shows that consumer behavior in the metaverse will differ from traditional e-commerce. Factors such as social interaction, gamification, and virtual identity will play a key role in influencing purchasing decisions.

Metaverse consumers are more likely to seek unique, personalized experiences and value social validation from their virtual communities.



3. Metaverse E-Commerce Opportunities

3.1. Personalized Shopping Experiences:

The metaverse opens up new possibilities for highly personalized shopping experiences. Businesses can create virtual storefronts where customers can interact with products, try on virtual clothing, and test products in simulated environments. AI-driven personalization can customize these experiences based on individual preferences, increasing customer satisfaction and loyalty.

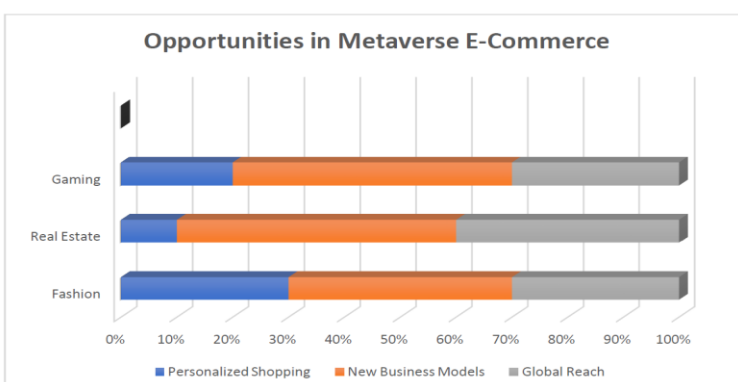
3.2. New Business Models

The Metaverse will facilitate the creation of new business models, including virtual goods and services, digital real estate, and non-fungible tokens (NFTs). These models allow companies to monetize their virtual assets and generate new revenue streams. Additionally, the Metaverse will enable the integration of social commerce, allowing users to shop in virtual communities and share their experiences with others.

3.3. Global Reach and Accessibility:

The Metaverse will transcend geographical boundaries, allowing companies to reach users around the world. Virtual marketplaces will operate 24/7, providing consumers with continuous access to products and services. This global reach also offers businesses the opportunity to reach new markets and audiences that may not be well covered in the physical world.

4. Challenges in Metaverse E-Commerce



4.1. Privacy and Security:

As e-commerce expands into the metaverse, privacy and security concerns are becoming increasingly evident. Collecting and storing large amounts of user data, including biometric information, creates the risk of data leakage and identity theft. Ensuring robust cybersecurity measures and complying with data protection regulations are key challenges for businesses operating in the metaverse.

4.2. Regulatory and Legal Issues:

Complex regulatory and legal challenges exist in the metaverse, particularly related to digital property, intellectual property, and consumer protection. The lack of a consistent legal framework across different jurisdictions makes it difficult to enforce laws in the metaverse. Businesses must navigate these complex regulations to avoid legal pitfalls and ensure compliance.

4.3. Technical Barriers:

Despite significant progress, technical barriers still exist to widespread adoption of the metaverse. High costs of VR/AR equipment, limited Internet bandwidth, and technical challenges related to interoperability between different metaverse platforms may hinder the growth of e-commerce in this space. Overcoming these obstacles requires continued investment in infrastructure and technology development.

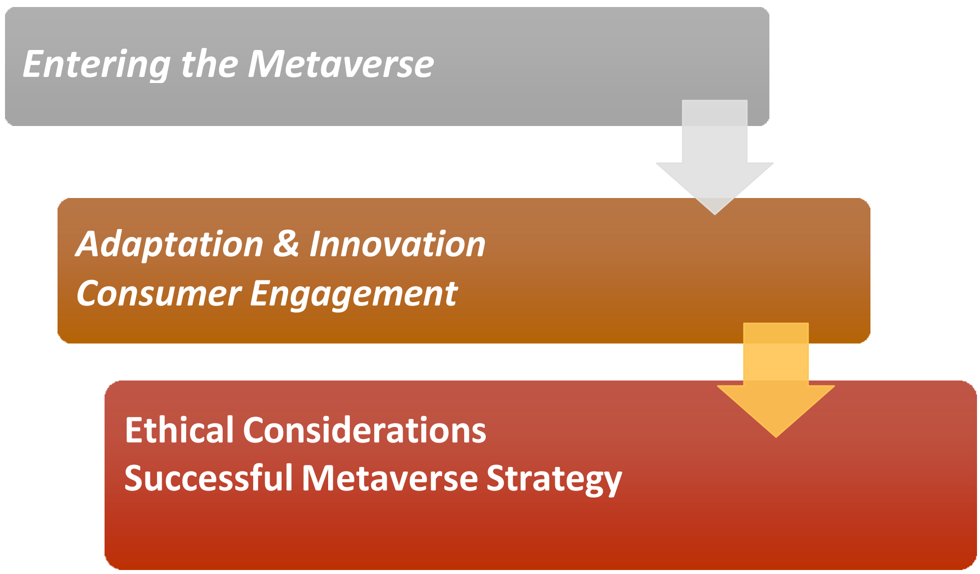
5. Strategic Implications for Businesses

5.1. Adapt and Innovate:

To succeed in the metaverse, businesses will need to adapt their strategies and embrace innovation. This may include investing in metaverse-related technologies, creating virtual storefronts, and developing new products tailored to the virtual environment. Businesses should also consider partnering with metaverse platforms and other parties to leverage their expertise and expand their reach.

5.2. Consumer Engagement and Community Building:

To build strong relationships with consumers in the metaverse, businesses will need to focus on engagement and community building. Businesses should leverage social commerce, gamification, and interactive experiences to create a sense of belonging and loyalty among their customers. Additionally, developing a strong brand presence in the metaverse will help businesses stand out in a crowded digital marketplace.



5.3. Ethical Considerations:

Businesses should consider the ethical implications of their actions as they operate in the metaverse. This includes ensuring transparency in data collection and use, protecting consumer rights, and promoting inclusivity and diversity within the virtual community. Adhering to ethical standards will help businesses build trust with their customers and contribute to a positive metaverse ecosystem.

Conclusion

The future of e-commerce in the metaverse brings both exciting opportunities and significant challenges. As the metaverse evolves, businesses must proactively adapt to this new digital environment. By embracing innovation, focusing on consumer engagement, and addressing ethical and regulatory concerns, businesses can successfully navigate the complexities of metaverse e-commerce and realize its full potential. The strategic implications outlined in this paper provide businesses with a roadmap for success in the emerging metaverse economy.

References

1. Ball, M. (2021). The Metaverse: And How It Will Revolutionize Everything. W.W. Norton & Company.

2. Dionisio, J. D., Burns III, W. G., & Gilbert, R. (2013). 3D virtual worlds and the metaverse: Current status and future possibilities. ACM Computing Surveys (CSUR), 45(3), 1-38.

3. Mystakidis, S. (2022). Metaverse. Encyclopedia, 2(1), 486-497. doi:10.3390/encyclopedia2010031.

4. Tussyadiah, I. P., & Miller, G. (2019). Perceived impacts of AI and automation on jobs in tourism and hospitality. International Journal of Contemporary Hospitality Management, 31(9), 3765-3786. doi:10.1108/IJCHM-06-2018-0481

5. Kaplan, A. M., & Haenlein, M. (2009). The fairyland of second life: Virtual social worlds and how to use them. Business Horizons, 52(6), 563-572. doi: 10.1016/j.bushor.2009.07.002

6. Lee, L. H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., ... & Hui, P. (2021). All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda. arXiv preprint arXiv:2110.05352.

7. Park, S. M., & Kim, Y. G. (2022). A metaverse: Taxonomy, components, applications, and open challenges. IEEE Access, 10, 4209-4251. doi:10.1109/ACCESS.2021.3140175.

8. Deloitte (2022). The metaverse and its impact on the business world.

Deloitte Insights. Retrieved from [https://www2.deloitte.com] (https://www2.deloitte.com).

9. PwC (2022). Understanding the metaverse: What business leaders need to know. PwC Insights. Retrieved from [https://www.pwc.com] (https://www.pwc.com)

10. Gartner (2023). The Future of E-commerce in the Metaverse. Gartner Research. Retrieved from [https://www.gartner.com] (https://www.gartner.com)

Impact of Modern Technology in Education System

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ABSTRACT

Technology is the application of scientific knowledge to develop tools and processes that enhance efficiency and transform the world. It is indeed a remarkable gift to humanity, playing a pivotal role in every aspect of life. Technology has fundamentally changed the way we live, automating many tasks that were once manual and enabling complex processes to be completed with greater ease and efficiency. As a result, our way of living has improved significantly. One area where technology has had a profound impact is education. The introduction of computers and other digital tools in schools has revolutionized teaching and learning. It has made the exchange of knowledge between teachers and students more effective, engaging, and enjoyable. The importance of technology in education is undeniable, as it continues to reshape the learning experience for the better. This article will highlight the impact of modern technologies in the education system and the challenges faced by it.

Keywords: Technology, Education system, challenges

INTRODUCTION

The 21st century is often referred to as the age of technology, given the pivotal role it plays in our daily lives and the global economy. In today's world, a country lacking in technological advancement faces significant challenges in economic growth, as technology simplifies tasks and reduces time consumption. Its impact is evident across all sectors, including education.

In the field of education, technology has revolutionized the way information is gathered, accessed, and applied across various disciplines. It has enabled students to explore creative and innovative approaches to learning, contributing to their overall development and reshaping how they think. While the integration of technology in education has numerous benefits, it also presents certain challenges. Technology has increased student engagement and made personalized learning possible. Teachers can now create tailored lesson plans that suit each student's learning style, pace, and interests. Additionally, students have access to an abundance of online resources, allowing them to learn at their own pace, in their own time, and in environments that best suit them.

India, as a developing nation, is making significant strides in education, with a notable increase in the number of universities and colleges. Although the higher education system in India faces many challenges, it also presents numerous opportunities for improvement. In the post-COVID-19 era, the primary challenge for India's higher education system will be the development of online distance learning courses and the creation of policies to attract international students. While higher education has been a priority in India, rising demand—driven by liberalization, privatization, globalization, and the need for a skilled workforce—has put pressure on the system. In response, the government has implemented measures to ensure quality while accommodating growing demand.

Educational technology is the systematic organization of learning processes, adapting methods and tools to meet identified educational goals. This involves recognizing the diversity of learners' needs, the contexts of learning, and the provisions required to meet these needs. The challenge is to design systems that facilitate teaching and learning in a way that achieves these goals. Educational technology serves as a catalyst for change in the classroom, influencing not only teachers and students but also broader issues such as access, equity, and quality. While the concept of educational technology has evolved over time, its roots can be traced back to figures like Franklin Bobbitt (1924) and WW Carters (1945), with Finn (1962) describing it as a process and mindset for addressing educational challenges.

Sustainable development encompasses social well-being, which is deeply linked to education. Information technology has become a key driver in disseminating knowledge and has played a central role in advancing educational reforms. The advent of new technology-assisted learning tools, such as mobile devices, smartboards, MOOCs, tablets, laptops, simulations, dynamic visualizations, and virtual laboratories, has transformed the educational landscape in schools and institutions. The Internet of Things (IoT) has emerged as a highly cost-effective way to educate young minds and offers a powerful means to provide a world-class learning experience for all.

Educational technology companies are constantly innovating to expand access to education, especially for those lacking adequate educational resources. Social media has also become an integral part of the e-learning process, with many teachers and students using it as a key tool for sharing information on important topics. Social media not only facilitates instant communication but also creates networking opportunities for social engagement and even career prospects.

Traditional classroom teaching methods often fall short in providing immediate feedback, faster evaluations, and higher engagement. Digital learning tools bridge this gap by offering efficiencies that traditional methods cannot match. As smartphones and wireless devices become more widespread, schools and educational institutions are increasingly incorporating these technologies into the classroom. The adaptability and unobtrusive nature of today's technology make learning more attractive to the next generation. However, this shift can present challenges, particularly for traditional educators who may see these devices as distractions rather than valuable learning tools.

An online classroom calendar, displaying class schedules, assignments, field trips, guest lectures, exams, and semester breaks, could help students better organize their academic lives. By embracing these digital tools, educators can enhance the learning experience and cater to the evolving needs of modern students.

The Importance of Digital Technologies in Education

1. **Access to Resources:** Digital technologies provide students with access to a vast array of information and educational materials online, extending learning opportunities beyond traditional textbooks. This breaks down barriers to quality resources, promoting a more equitable educational environment.

2. **Increased Engagement and Motivation:** Interactive tools like simulations and gamified learning platforms enhance student engagement by making learning more dynamic and enjoyable. This fosters a positive attitude toward education, motivating students to stay involved.

3. **Collaboration and Communication:** Platforms like Google Classroom, Zoom, and online discussion forums facilitate seamless collaboration and communication between students and teachers. These tools enable real-time feedback and support, regardless of geographical location.

4. **Real-time Feedback and Assessment:** Technology allows for instant feedback on assessments, helping educators identify areas where students may need extra support and allowing for timely intervention.

5. **Global Learning Opportunities:** Digital tools connect students to global perspectives and resources, promoting cultural awareness and broadening their understanding of the world.

6. **Preparation for the Future:** Incorporating technology into education helps students develop essential digital skills, such as problem-solving, communication, and digital literacy. These skills are critical for success in the modern workforce, and early exposure prepares students for future career demands.
7. **Enhanced Learning Experiences:** Technology offers a variety of tools that cater to different learning styles, making education more engaging and interactive. Multimedia presentations, educational apps, and online simulations enrich learning and improve comprehension.
8. **Flexibility and Accessibility:** Digital technologies allow for blended and remote learning, enabling education to continue beyond traditional classroom settings. This flexibility accommodates diverse life circumstances, offering students the ability to learn at their own pace and in their preferred environment.
9. **Lifelong Learning:** Digital platforms promote a culture of continuous learning, allowing individuals to pursue education at any stage of life, supporting personal and professional growth throughout their careers.

The Growth of the Online Education Market in India

The online education market in India has seen remarkable growth in recent years, driven by several key factors:

1. **Customer Preferences:** One of the primary drivers of this growth is the increasing demand for flexible and accessible educational options. Online education allows learners to study at their own pace and from the comfort of their homes, making it especially attractive to working professionals and individuals in remote areas who may not have access to traditional institutions. Additionally, the wide variety of courses offered by online platforms enables individuals to tailor their learning to their specific interests and career goals.

2. **Market Trends:** The growing integration of technology into education has been another key trend. With the widespread availability of smartphones and high-speed internet, more people have access to online learning. This has led to an expansion in the number of online education providers and the diversity of programs they offer. Emerging technologies like virtual reality and artificial intelligence are also being incorporated into online platforms, enhancing the learning experience and making it more immersive.

3. **Local Demographics:** India's large, young, and tech-savvy population is highly receptive to online education. This demographic is eager to develop new skills and knowledge, making them a key driver of market growth. Furthermore, government initiatives promoting digital literacy and online education have boosted the market. The availability of affordable smartphones and internet plans has also made online education more accessible to a broader population.

4. **Macroeconomic Factors:** India's rapid economic growth has led to a rising demand for skilled professionals across industries. Online education offers a cost-effective and efficient way for individuals to acquire or upgrade their skills, making it a popular choice among job seekers and professionals aiming to remain competitive in the job market. The COVID-19 pandemic further accelerated the shift to online education, as traditional institutions transitioned to digital platforms to ensure continuity of learning.

Market Data and Forecasts:

- Revenue in India's online education market is projected to reach ₹557.30 billion by 2024.
- The market is expected to grow at an annual rate (CAGR) of 23.58% from 2024 to 2029, reaching a projected value of ₹1,606.00 billion by 2029.

- The online learning platform segment is expected to generate ₹457.00 billion in revenue by 2024.
- The average revenue per user (ARPU) in India's online education market is expected to be ₹2.94k in 2024, with the number of users reaching 309.1 million by 2029.
- User penetration in the online education market is expected to be 13.2% in 2024.

Modern Technologies in Education

These projections reflect a strong and growing demand for digital education in India, supported by technological advancements, changing consumer preferences, and a favorable demographic and economic landscape. Modern technology has greatly transformed education, providing students with new and engaging ways to learn. Recent insights reveal that when students use modern tools and technologies, their learning experience becomes more interactive and immersive. They find lessons more engaging and interesting, leading to improved knowledge retention and easier access to information.

The integration of technology into education has made the transfer of knowledge more efficient and effective. It enhances cognitive processes, allowing students to think and learn faster when assisted by modern innovations. In today's world, reliance on technology in education—from schools to universities—has become essential, making learning smoother and more accessible. The technologies can be used by the students in the following ways:

(1). **Internet connection and round the clock connectivity**

The internet has become an indispensable tool, growing exponentially in importance over the past decade. In the realm of education, its value cannot be overstated. Despite concerns like fraud and potential misuse, the internet remains a tremendous asset for students. Today, it is integrated into almost every aspect of daily life—from televisions and gaming consoles to smartphones, making it ubiquitous. For students, the internet provides incredible convenience. It offers access to a wide range of resources, including tutorials, study materials, and other academic aids that enhance their learning experience and help them achieve better results. This round-the-clock connectivity has revolutionized how students learn, making education more accessible, flexible, and supportive.

(2). **Using projectors and visuals**

Visual images have a much stronger impact than mere words, making them an essential tool in education. The use of projectors and visuals to support learning has become a key aspect of modern teaching methods. Leading institutions around the world increasingly rely on engaging PowerPoint presentations and visual projections to make lessons more interactive and engaging.

By incorporating technology like projectors in schools and colleges, educators can significantly boost student interest and interaction. Appealing visuals capture students' attention, encouraging them to think more critically, while enhancing their overall learning experience. This approach not only keeps students motivated but also makes the learning process more efficient and effective.

(3). **Online degrees with the use of technology**

Online degrees have become increasingly popular, with many people opting for online courses to further their education and obtain certifications. Leading institutions now offer impressive online programs utilizing various applications and the internet. This trend is expected to grow as awareness and support for online learning continue to expand.

The online degree landscape is especially appealing to working students seeking flexible study options. Technology plays a multifaceted role in education: it is integrated into the curriculum, serves as an instructional delivery system, supports teaching methods, and enhances the overall learning experience. Thanks to these advancements, education has transitioned from being passive and reactive to becoming interactive and dynamic.

Challenges of Implementing Educational Technology in the Teaching and Learning Process

Educational technology has become a key component of 21st-century learning. When effectively integrated, tools such as computers, video conferencing, and artificial intelligence can enhance education, support students with disabilities, and offer numerous other benefits. However, the adoption of educational technology is often met with challenges. Here are the top seven barriers faced by educators and administrators in integrating technology into classrooms:

1. **Budget Constraints:**

   Limited budgets are the most significant challenge preventing the widespread adoption of educational technology. Schools often struggle to secure the necessary funding to provide tech tools for students. In fact, a study found that 75.9% of educators identified budget restrictions as the primary obstacle to incorporating technology in education.

2. **Insufficient Professional Training:**

   With the constant development of new educational technologies, teachers need ongoing training to effectively use these tools and teach students how to leverage them. Without adequate training, both teachers and students may not experience the full benefits of educational technology, highlighting the need for time and resources dedicated to professional development.

3. **Weak Network Infrastructure:**

   Access to technology is only as good as the network infrastructure supporting it. Schools need reliable, fast Wi-Fi, robust data security, and seamless access to digital resources. Without these essentials, even the best devices and software will be underutilized, making the creation of a strong infrastructure a crucial foundation for technology use in education.

4. **Resistance to Change:**

   Some teachers may resist the adoption of new technologies, not due to a dislike of technology, but because of concerns about insufficient training or a fear of taking risks in the classroom. In many cases, teachers also lack clear guidance on which tools will best enhance student outcomes. Providing support and demonstrating the benefits of specific technologies can help educators overcome this resistance.

5. **Lack of Integration into the Curriculum:**

   Even when schools provide access to technology, many teachers struggle with how to incorporate it meaningfully into their curriculum. Without proper guidance, technology may remain an underused resource. Teachers need support in designing lessons that make the best use of the available tools, ensuring that technology enriches the educational experience.

6. **Unreliable Devices and Software:**

   A common frustration is the inconsistency of devices and software. From malfunctioning notebooks to bugs in educational platforms, unreliable technology can disrupt learning. For technology to remain a viable option, schools must ensure that devices and software are dependable and easy to use.

7. **Administrators' Hesitance:**

   Some administrators may hesitate to adopt new technologies due to budgetary concerns or uncertainty about the measurable benefits of educational technology. Without clear data on how technology can improve student outcomes, it can be challenging to justify large investments. However, with the rise of distance learning and the growing importance of digital tools, this reluctance is expected to diminish over time.

While these challenges are significant, addressing them through adequate training, infrastructure improvements, and clear administrative support can help unlock the full potential of educational technology in classrooms.

Conclusion

Technological advancements in education have opened up exciting opportunities for both teachers and learners, driving the future of education in innovative ways. These developments have transformed how we learn, making the process more interactive and engaging. However, despite the benefits, there are still challenges that must be addressed when integrating technology into education.

With the right strategies in place, technology can greatly enrich the learning experience. It will continue to be a key factor in shaping the future, and it is up to us to ensure that its potential is harnessed responsibly. By addressing its risks and challenges, we can make sure that technology serves the broader good.

As we move forward, it is crucial to remain vigilant and proactive, ensuring that technology is used to meet the needs of all people, contributing to a more just, equitable, and sustainable world. By improving accessibility, fostering personalized and interactive learning experiences, and encouraging collaboration, technology has revolutionized education. As we continue to embrace these advancements, it is vital to integrate them thoughtfully and ethically, unlocking their full potential to enhance education for everyone. The ongoing evolution of educational technology holds tremendous promise for creating a more inclusive, engaging, and effective learning environment for both current and future generations.

References

1. M. K. K. Singh and N. A. Samah, "Impact of Smartphone: A Review on Positive and Negative Effects on Students," Asian Soc. Sci., vol. 14, no. 11, p. 83, 2018, doi: 10.5539/ass.v14n11p83.
2. R. Panigrahi, P. R. Srivastava, and D. Sharma, "Online learning: Adoption, continuance, and learning outcome—A review of literature," Int. J. Inf. Manage., vol. 43, no. July 2016, pp. 1–14, 2018, doi: 10.1016/j.ijinfomgt.2018.05.005.
3. R. Raja and P. C. Nagasubramani, "Impact of modern technology in education," J. Appl. Adv. Res., pp. S33–S35, 2018, doi: 10.21839/jaar.2018.v3is1.165.
4. S. A. D. Popenici and S. Kerr, "Exploring the impact of artificial intelligence on teaching and learning in higher education," Res. Pract. Technol. Enhanc. Learn., vol. 12, no. 1, 2017, doi: 10.1186/s41039-017-0062-8.
5. J. E. Lawrence and U. A. Tar, "Factors that influence teachers' adoption and integration of ICT in teaching/learning process," EMI. Educ. Media Int., vol. 55, no. 1, pp. 79–105, 2018, doi: 10.1080/09523987.2018.1439712.
6. S. Palvia et al., "Online Education: Worldwide Status, Challenges, Trends, and Implications," J. Glob. Inf. Technol.
7. https://ijfans.org/issue-content/the-development-of-education-and-modern-technology-and-their-positive-negative-impacts-981
8. https://www.researchgate.net/publication/360810919_Understanding_the_Role_of_Digital_Technologies_in_Education_A_review
9. https://coed.dypvp.edu.in/educational-resurgence-journal/documents/june-2021/36-Dr-Shaila-Sarang-New-converted.pdf
10. https://www.researchgate.net/publication/325086709_Impact_of_modern_technology_in_education

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